UNCW

2004-2005

GRADUATE CATALOGUE

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UNIVERSITY OF NORTH CAROLINA AT WILMINGTON

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The University of North Carolina at Wilmington

Graduate Catalogue

FOR USE IN LIBRARY ONLY

2004–2005
Bulletin 14

The University of North Carolina at Wilmington is committed to and will provide equality of educational and employment opportunity for all persons regardless of race, sex, age, color, gender, national origin, ethnicity, creed, religion, disability, sexual orientation, political affiliation, marital status, veteran status, or relationship to other university constituents—except where sex, age or ability represent bona fide educational or occupational qualifications or where marital status is a statutorily established eligibility criterion for state-funded employee benefit programs.

INFORMATION

Information
Graduate Admissions – 910.962.3135 or 910.962.4117 – www.uncw.edu/grad_info/
Financial Aid and Veterans Services– 910.962.3177 – www.uncw.edu/finaid/
Registrar – 910.962.3125 – www.uncw.edu/reg/
University Operator – 910.962-3000
e-mail: gradstudies@uncw.edu
http://www.uncw.edu/

Cover Photographs: Frank S. Bua and Brownie Harris

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A separate undergraduate catalogue is available in the UNCW Bookstore.

All provisions, regulations, degree programs, course listings, etc., in effect when this catalogue went to press are subject to revision by the appropriate governing bodies of the University of North Carolina at Wilmington

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Welcome to the University of North Carolina at Wilmington and congratulations on your enrollment at one of the most selective and competitive academic institutions in the nation!

You may be aware that UNCW was recently ranked among the top 10 regional public universities in the South by *U.S. News & World Report* and as one of the top 100 (ranked at 35th, to be precise) best public university values in the nation by *Kiplinger's Personal Finance*. Many of UNCW's academic programs and student services have received similar national acclaim.

In addition, the national reputation of this university has been enhanced in recent years by the performance of Seahawk student-athletes, in both athletic competition and in the classroom. UNCW was recently recognized by *USA Today* and the NCAA as having the highest graduation rate (89 percent) for student-athletes of all NCAA Division IAAA programs in the nation.

While in Wilmington, you will have access to a lively and historic mid-sized city in a wonderful coastal location. I urge you to be a good neighbor and to volunteer in the community, as so many of our students have done in the past. When you have graduated, I encourage you to continue to give back to your community, wherever that may be, and to be an active member of the Alumni Association.

You are embarking on what promises to be the most rewarding and perhaps the most challenging journey that you have ever experienced. Your response to this challenge and your performance over the next four years will have a profound impact on your life. On behalf of the Board of Trustees, I wish you a most successful college career and welcome you heartily to the family of the University of North Carolina at Wilmington.

Very truly yours,

Jeff D. Etheridge, Jr.
Chair of the Board of Trustees

Welcome to the University of North Carolina at Wilmington. This catalogue provides a roadmap to the unmatched range of intellectual opportunities available here at UNCW. In it you will find information on classes offered by our College of Arts and Sciences, Cameron School of Business, Watson School of Education, and School of Nursing. I hope this catalogue will inspire you to consider new and inventive ways of pursuing a university education.

UNCW makes it possible to achieve both breadth and depth in your education. The wide array of majors will undoubtedly unleash the intellectual energy and perspective you need to become a well versed and educated UNCW graduate.

Thus, I encourage you to take full advantage of this course catalogue. Be bold and creative in designing your UNCW education. Intellectual breadth and agility are the tools you will need to succeed in the 21st century.

Sincerely,

Rosemary DePaolo
Chancellor

2004

JANUARY

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CALENDAR OF EVENTS
2004–2005

Fall Semester, 2004

Registration and SEAWEB dates–Please refer to the Calendar of Events at www.uncw.edu/reg/

August 11, Wednesday	Academic year begins
August 12, Thursday	Transfer student orientation and advising
August 14, Saturday	On-campus housing opens for new and transfer students only
August 15-16 Sunday-Monday	Freshman orientation and advising
August 16, Monday	On-campus housing opens for returning students
August 17, Tuesday	Faculty meeting
August 18, Wednesday	Classes begin
August 25, Wednesday	Last day for registration/Last day to drop (without a grade) or add a class. Tuition/fee payment after this date will be subject to a late payment charge.
September 6, Monday	Labor Day holiday
October 6, Wednesday	Last day to withdraw with W—undergraduate students
October 7, Thursday	Fall vacation begins
October 11, Monday	Fall vacation ends/Classes resume
November 10, Wednesday	Last day to withdraw with W—graduate students
November 15, Monday	Graduation application deadline—Spring 2005—undergraduate and graduate students
November 24, Wednesday	Thanksgiving vacation begins
November 29, Monday	Thanksgiving vacation ends/Classes resume
December 2, Thursday	Last day of classes
December 3, Friday	Reading Day
December 4-10, Saturday-Friday	Final Examinations
December 10, Friday	Fall semester ends
December 11, Saturday	Commencement
December 12, Sunday	On-campus housing closes 10 a.m.

Spring Semester, 2005

Registration and SEAWEB dates–Please refer to the Calendar of Events at www.uncw.edu/reg/

January 2, Sunday	Spring semester begins/On-campus housing opens 10 a.m.
January 4, Tuesday	Orientation and advising
January 5, Wednesday	Classes begin
January 12, Wednesday	Last day for registration/Last day to drop (without a grade) or add a class. Tuition/fee payment after this date will be subject to a late payment charge.
January 17, Monday	Martin Luther King holiday
February 23, Wednesday	Last day to withdraw with W—undergraduate students
February 26, Saturday	Spring vacation begins/On-campus housing closes 10 a.m.
March 6, Sunday	On-campus housing opens 10 a.m.
March 7, Monday	Spring vacation ends/Classes resume
March 24, Thursday	Easter vacation begins
March 28, Monday	Easter vacation ends/Classes resume
March 30, Wednesday	Last day to withdraw with W—graduate students
April 14, Thursday	Faculty meeting

April 15, Friday	Graduation application deadline—Summer 2005 and Fall 2005—undergraduate and graduate students
April 25, Monday	Last day of classes
April 26, Tuesday	Reading Day
April 27-29, Wednesday-Friday	Final Examinations
May 2-4, Monday-Wednesday	Final Examinations
May 4, Wednesday	Spring semester ends
May 7, Saturday	Commencement/Academic year ends
May 8, Sunday	On-campus housing closes 10 a.m.

Summer Session I, 2005

Registration and SEAWEB dates–Please refer to the Calendar of Events at www.uncw.edu/reg/

May 18, Wednesday	On-campus housing opens 10 a.m./Transfer Orientation
May 19, Thursday	Classes begin
May 24, Tuesday	Last day for registration/Last day to drop (without a grade) or add a class. Tuition/fee payment after this date will be subject to a late payment charge.
May 30, Monday	Memorial Day holiday
June 2, Thursday	Last day to withdraw with W—undergraduate students
June 13, Monday	Last day to withdraw with W—graduate students
June 20, Monday	Last day of classes
June 21, Tuesday	Final examinations/Term ends
June 22, Wednesday	On-campus housing closes 10 a.m.

Summer Session II, 2005

Registration and SEAWEB dates–Please refer to the Calendar of Events at www.uncw.edu/reg/

June 26, Sunday	On-campus housing opens 10 a.m.
June 27, Monday	Classes begin
June 29, Wednesday	Last day for registration/Last day to drop (without a grade) or add a class. Tuition/fee payment after this date will be subject to a late payment charge.
July 4, Monday	Independence Day holiday
July 12, Tuesday	Last day to withdraw with W—undergraduate students
July 19, Tuesday	Last day to withdraw with W—graduate students
July 27, Wednesday	Last day of classes
July 28, Thursday	Final examinations/Term ends
July 29, Friday	On-campus housing closes 10 a.m.

CALENDAR OF EVENTS
2005–2006

Fall Semester, 2005

Registration and SEAWEB dates–Please refer to the Calendar of Events at www.uncw.edu/reg/

August 10, Wednesday	Academic year begins
August 11, Thursday	Transfer student orientation and advising
August 13, Saturday	On-campus housing opens for new and transfer students only
August 14-15 Sunday-Monday	Freshman orientation and advising
August 15, Monday	On-campus housing opens for returning students
August 17, Wednesday	Classes begin
August 18, Thursday	Faculty meeting
August 24, Wednesday	Last day for registration/Last day to drop (without a grade) or add a class. Tuition/fee payment after this date will be subject to a late payment charge.
September 5, Monday	Labor Day holiday
October 5, Wednesday	Last day to withdraw with W—undergraduate students
October 5, Wednesday	Fall vacation begins 10:30 p.m.
October 10, Monday	Fall vacation ends/Classes resume
November 11, Friday	Last day to withdraw with W—graduate students
November 15, Tuesday	Graduation application deadline—Spring 2006—undergraduate and graduate students
November 22, Tuesday	Thanksgiving vacation begins 10:30 p.m.
November 28, Monday	Thanksgiving vacation ends/Classes resume
December 1, Thursday	Last day of classes
December 2, Friday	Reading Day
December 3-9, Saturday-Friday	Final Examinations
December 10, Saturday	Fall semester ends
December 10, Saturday	Commencement
December 11, Sunday	On-campus housing closes 10 a.m.

Spring Semester, 2006

Registration and SEAWEB dates–Please refer to the Calendar of Events at www.uncw.edu/reg/

January 6, Friday	Spring semester begins
January 8, Sunday	On-campus housing opens 10 a.m.
January 9-10, Monday-Tuesday	Orientation and advising
January 11, Wednesday	Classes begin
January 16, Monday	Martin Luther King holiday
January 18, Wednesday	Last day for registration/Last day to drop (without a grade) or add a class. Tuition/fee payment after this date will be subject to a late payment charge.
March 1, Wednesday	Last day to withdraw with W—undergraduate students
March 4, Saturday	Spring vacation begins/On-campus housing closes 10 a.m.
March 12, Sunday	On-campus housing opens 10 a.m.
March 13, Monday	Spring vacation ends/Classes resume
March 29, Wednesday	Last day to withdraw with W—graduate student
April 12, Wednesday	Easter vacation begins 10:30 p.m.
April 17, Monday	Easter vacation ends/Classes resume

April 17, Monday	Graduation application deadline—Summer 2006 and Fall 2006—undergraduate and graduate students
April 20, Thursday	Faculty meeting
May 1, Monday	Last day of classes
May 2, Tuesday	Reading Day
May 3-5, Wednesday-Friday	Final Examinations
May 8-10, Monday-Wednesday	Final Examinations
May 11, Thursday	On-campus housing closes 10 a.m.
May 13, Saturday	Spring semester ends
May 13, Saturday	Commencement/Academic year ends

Summer Session I, 2006

Registration and SEAWEB dates–Please refer to the Calendar of Events at www.uncw.edu/reg/

May 17, Wednesday	On-campus housing opens 10 a.m./Transfer Orientation
May 18, Thursday	Classes begin
May 23, Tuesday	Last day for registration/Last day to drop (without a grade) or add a class. Tuition/fee payment after this date will be subject to a late payment charge.
May 29, Monday	Memorial Day holiday
June 1, Thursday	Last day to withdraw with W—undergraduate students
June 12, Monday	Last day to withdraw with W—graduate students
June 19, Monday	Last day of classes
June 20-21, Tuesday-Wednesday	Final examinations/Term ends
June 22, Thursday	On-campus housing closes 10 a.m.

Summer Session II, 2006

Registration and SEAWEB dates–Please refer to the Calendar of Events at www.uncw.edu/reg/

June 25, Sunday	On-campus housing opens 10 a.m.
June 26, Monday	Classes begin
June 28, Wednesday	Last day for registration/Last day to drop (without a grade) or add a class. Tuition/fee payment after this date will be subject to a late payment charge.
July 4, Tuesday	Independence Day holiday
July 11, Tuesday	Last day to withdraw with W—undergraduate students
July 18, Tuesday	Last day to withdraw with W—graduate students
July 26, Wednesday	Last day of classes
July 27-28, Thursday-Friday	Final examinations/Term ends
July 29, Saturday	On-campus housing closes 10 a.m.

ADMINISTRATIVE OFFICERS OF THE UNIVERSITY OF NORTH CAROLINA AT WILMINGTON

Rosemary DePaolo, Ph.D. ..... *Chancellor*
Max Allen, M.A. ..... *Special Assistant to the Chancellor*
Mark W. Lanier, M.A. ..... *Assistant to the Chancellor and Assistant Secretary, Board of Trustees*
Mimi Cunningham, M.A. ..... *Assistant to the Chancellor for University Relations*
Nikki S. Howard, M.Ed., C.P.A. ..... *Assistant to the Chancellor for Compliance and Director of Internal Audit*
Peg Bradley-Doppes, M.A. ..... *Assistant to the Chancellor and Director of Athletics*
Kay S. Fryar, M.A. . ..... *Acting Assistant to the Chancellor for EPA Personnel Administration and Director of Human Resources*

ACADEMIC AFFAIRS

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Rebecca I Porterfield, Ph.D. ..... *Associate Vice Chancellor for Academic Affairs*
Denis G. Carter, Ph.D. ..... *Associate Vice Chancellor for Academic Outreach*
James P. McNab, Ph.D. ..... *Assistant Provost for International Programs*
Gay P. Howe, M.B.A. ..... *Assistant Vice Chancellor for Academic Affairs*
Roxie M. Shabazz, M.S.S. ..... *Assistant Vice Chancellor for Admissions*
P. Carol Ellis, Ph.D. ..... *Assistant to the Provost*
Kenneth W. Spackman, Ph.D. ..... *Director of University Planning*
Jo Ann M. Seiple, Ed.D. ..... *Dean, College of Arts and Sciences*
Lawrence S. Clark, J.D., L.L.M. ..... *Dean, Cameron School of Business*
Cathy L. Barlow, Ed.D. ..... *Dean, Watson School of Education*
Virginia W. Adams, Ph.D. ..... *Dean, School of Nursing*
Robert D. Roer, Ph.D. ..... *Dean, Graduate School*
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Ronald E. Whittaker, M.A. ..... *Registrar*
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Norman L. Bemelmans, B.M. ..... *Director of Kenan Auditorium*
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Kemille S. Moore, Ph.D. ..... *Director of General College*
Joanne E. Nottingham, Ph.D. ..... *Director of Campus Diversity*
Patricia A. Turrisi, Ph.D. ..... *Director of Center for Teaching Excellence*
Pamela B. Whitlock, M.B.A. ..... *Director of Sponsored Programs*

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Sharon H. Boyd, B.S. ..... *Associate Vice Chancellor for Business and Support Services*
Kay M. Ward, B.S. ..... *Associate Vice Chancellor for Finance*
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Anne E. Beach, M.B.A. ..... *Director of Accounting*
Emily J. Bliss, M.A. ..... *Director of Financial Aid and Veterans Services*

David M. Donaldson ..... *Director of University Police*
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Richard A. Fauson, M.B.A. ..... *Director of Auxiliary Services*
Mary E. Forsythe, B.S., C.P.M. ..... *Director of Purchasing Services*
Thomas A. Freshwater, B.S. ..... *Director of Physical Plant*
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Stan H. Harts, M.S. ..... *Director of Environmental Health and Safety*
Suzanne M. Helms, B.S. ..... *Director of Campus Services*
Vincent F. Mannella, B.S., P.E ..... *Director of Construction Services*
Mark D. Morgan, B.S. ..... *Director of Project Management*
Robert S. Russell, M.S. ..... *Director of Budgets*
Carol B. Strickland, B.S. ..... *Director of Financial Systems*
Cheryl D. Sutton, M.B.A. ..... *Special Assistant to Associate Vice Chancellor for Facilities/ Hub Coordinator*
Steve J. Weitnauer, B.S., P.E. ..... *Director of Facilities Planning and Design*

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Bobby E. Miller, B.S. ..... *Director of Computing Services*
Jeffrey L. Stanfield, M.B.A. ..... *Director of Audiovisual Media Services*
Beverly S. Vagnerini, M.S. ..... *Director of Client Services*
Michel W. Fougeres, B.A. ..... *Webmaster*
William W. Vereen, A.A.S. ..... *Director of Telecommunications Services*
Steven S. Perry, B.S. ..... *Computer Systems Manager*
Ray E. Humphries ..... *Manager of Computer Operations*
C. Jeff Hunnicutt ..... *Computer Networking Manager*
Kim H. Kelly ..... *Program Development Coordinator*
Gia Todd Long, B.A. ..... *Manager of Telecommunication Administrative Services*
Michael McQuery, A.S. ..... *Manager of Systems Maintenance and Installation*
Dana W. Ward, B.A. ..... *Campus Computer Training*
Chet M. Harvey, B.A. ..... *Microcomputer Support Manager*

PUBLIC SERVICE AND CONTINUING STUDIES

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H.E. "Hunter" Thompson, Jr., B.S. ..... *Assistant Vice Chancellor for Public Service*
Royce N. Angel, B.A. ..... *Special Assistant to the Vice Chancellor for Community Relations*
Michael P. Bradley, M.S. ..... *Director of North Carolina Marine Trades Program*
Donna S. Chi, M.B.A. ..... *Director of Finance and Administration*
Karel H. Dutton, M.A.L.S. ..... *Director of Lifelong Learning*
Leslie S. Langer, M.B.A. ..... *Regional Director of Small Business and Technology Development Center*
Nancy D. Maready, M.A.Ed. ..... *Director of Conferences*
Kathryn E. McDaniel, M.A. ..... *Director of Community Development*
Dustin H. Miller, B.S. ..... *Director of UNCW-TV*
Cathi Lee Phillips, B.A. ..... *Director of Web Services*
Cecil W. "Woody" Sutton, M.A. ..... *Director of WebU*
Diane B. Talley, M.S. ..... *Director of MarineQuest and Youth Programs*

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Terrence M. Curran, Ed.D. ..... *Associate Vice Chancellor and Dean of Students*
F. James Dragna, Ph.D. ..... *Associate Vice Chancellor/Student Development Services*
Heather S. Smith, M.B.A., ... *Assistant Vice Chancellor*
Andrea J. Dorow, M.S. ..... *Director of Transition Programs*
Carolyn E. Farley, M.S. ..... *Director of University Union*
Rachelle M. Hoover, M.S. ..... *Director of Center for Leadership Education and Service*
John F. Lewison, M.D. ..... *Interim Medical Director of Student Health Center*
Rex A. Pringle, M.A. ..... *Director of Campus Recreation*
Thom D. Rakes, M.Ed. ..... *Director of Career Services/Assistant to Vice Chancellor for Student Affairs for Technology and Assessment*
B. Lynne Reeder, Ph.D. ..... *Director of Counseling Center*
Bradley W. Reid, M.S. ..... *Director of Housing and Residence Life*
Caesar C. Ross, M.P.A., ... *Director of Student Health Centerr*
Margaret N. Turner, Ed.D. ..... *Director of Student Achievement Services*

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M. Tyrone Rowell, M.A. ..... *Senior Associate Vice Chancellor for University Advancement*
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Dana L. Fischetti, B.A. ..... *Director of Operations*
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J. Scott Joyner, M.S. ..... *Director of Development, Watson School of Education and International Programs*
Hilda M. Maness ..... *Director of Development, Center for Marine Science*
Cynthia J. Salisbury. ..... *Director of Annual Giving*
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Claire Z. Stanley, B.A. ..... *Director of Special Events*
Edwin T. Stuart, B.A. ..... *Director of Development, College of Arts and Sciences*

GRADUATE COUNCIL MEMBERSHIP
2003-2004

Chair: Robert D. Roer, *Dean of the Graduate School*

College of Arts and Sciences

Division I

Rebecca Lee, Creative Writing, term ends spring 2005
Michael Seidman, History, term ends spring 2005
Barbara Waxman, English, term ends spring 2006

Division II

Lynn A. Leonard, Earth Sciences, term ends spring 2004
Marvin Moss, Physics and Physical Oceanography, term ends spring 2006
D. Ann Pabst, Biological Sciences, term ends spring 2005

Division III

Steve Meinhold, Political Science, term ends spring 2005
Carol Ann Pilgrim, Psychology, term ends spring 2004

Cameron School of Business

Douglas Kline, Information Systems and Operations Management, term ends spring 2005
Stephen C. Harper, Management and Marketing, term ends spring 2004

Watson School of Education

Mahnaz Moallem, Specialty Studies, term ends spring 2005
James M. Applefield, Curricular Studies, term ends spring 2004

School of Nursing

P. Allen Gray, term ends spring 2005

Ex–Officio and Non–Voting Members

Rosemary DePaolo, *Chancellor*
Paul E. Hosier, *Interim Provost and Vice Chancellor, Academic Affairs*
Virginia W. Adams, *Dean of the School of Nursing*
Lawrence Clark, *Dean of the Cameron School of Business*
Jo Ann Seiple, *Dean of the College of Arts and Sciences*
Cathy Barlow, *Dean of the Watson School of Education*
Sherman Hayes, *University Librarian*
Daniel Noland, *Faculty Senate President*
Patricia Moyer, *Graduate Student Association Representative*

THE UNIVERSITY OF NORTH CAROLINA
SIXTEEN CONSTITUENT INSTITUTIONS

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Administrative Officials

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Gretchen M. Bataille ..... *Senior Vice President for Academic Affairs*
Jeffrey R. Davies ..... *Vice President for Finance and Chief Financial Officer*
Russ Lea ..... *Vice President for Research and Sponsored Programs*
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Robyn R. Render ..... *Vice President for Information Resources and Chief Information Officer*
Richard Thompson ..... *Vice President for University-School Programs*
Leslie J. Winner ..... *Vice President and General Counsel*
Bart Corgnati ..... *Secretary of the University*

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THE UNIVERSITY OF NORTH CAROLINA

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G. Irvin Aldridge, *Vice Chair*
Patsy B. Perry, *Secretary*

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G. Irvin Aldridge
James G. Babb
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Bert Collins
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J. Bradley Wilson

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J. Addison Bell
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Peter Keber
Adelaide Daniels Key
Leroy Lail
Charles S. Norwood
Cary C. Owens
Patsy B. Perry
Gladys Ashe Robinson
Estelle "Bunny" Sanders
Priscilla P. Taylor

Members Emeriti

C. Clifford Cameron
James E. Holshouser, Jr.
Benjamin S. Ruffin

Ex-Officio

Jonathan L. Ducote

HISTORY OF THE UNIVERSITY OF NORTH CAROLINA

In North Carolina, all the public educational institutions that grant baccalaureate degrees are part of the University of North Carolina. The University of North Carolina at Wilmington is one of the 16 constituent institutions of the multi-campus state university. The University of North Carolina, chartered by the N.C. General Assembly in 1789, was the first public university in the United States to open its doors and the only one to graduate students in the eighteenth century. The first class was admitted in Chapel Hill in 1795. For the next 136 years, the only campus of the University of North Carolina was at Chapel Hill.

In 1877 the N.C. General Assembly began sponsoring additional institutions of higher education, diverse in origin and purpose. Five were historically black institutions, and another was founded to educate American Indians. Several were created to prepare teachers for the public schools. Others had a technological emphasis. One is a training school for performing artists.

In 1931 the N.C. General Assembly redefined the University of North Carolina to include three state-supported institutions: the campus at Chapel Hill (now the University of North Carolina at Chapel Hill), North Carolina State College (now North Carolina State University at Raleigh), and Woman's College (now the University of North Carolina at Greensboro). The new multi-campus University operated with one board of trustees and one president. By 1969 three additional campuses had joined the University through legislative action: the University of North Carolina at Charlotte, the University of North Carolina at Asheville, and the University of North Carolina at Wilmington.

In 1971 the General Assembly passed legislation bringing into the University of North Carolina the state's ten remaining public senior institutions, each of which had until then been legally separate: Appalachian State University, East Carolina University, Elizabeth City State University, Fayetteville State University, North Carolina Agricultural and Technical State University, North Carolina Central University, the North Carolina School of the Arts, Pembroke State University, Western Carolina University, and Winston-Salem State University. This action created the current 16-campus University. (In 1985 the North Carolina School of Science and Mathematics, a residential high school for gifted students, was declared an affiliated school of the University; and in 1996 Pembroke State University was renamed The University of North Carolina at Pembroke through legislative action.)

The UNC Board of Governors is the policy-making body legally charged with "the general determination, control, supervision, management, and governance of all affairs of the constituent institutions." It elects the president, who administers the University. The 32 voting members of the Board of Governors are elected by the General Assembly for four-year terms. Former board chairmen and board members who are former governors of North Carolina may continue to serve for limited periods as non-voting members emeriti. The president of the UNC Association of Student Governments, or that student's designee, is also a non-voting member.

Each of the 16 constituent institutions is headed by a chancellor, who is chosen by the Board of Governors on the president's nomination and is responsible to the president. Each institution has a board of trustees, consisting of eight members elected by the Board of Governors, four appointed by the governor, and the president of the student body, who serves ex-officio. (The NC School of the Arts has two additional ex-officio members.) Each board of trustees holds extensive powers over academic and other operations of its institution on delegation from the Board of Governors.

UNIVERSITY OF NORTH CAROLINA AT WILMINGTON

Mission Statement

The University of North Carolina at Wilmington is a public comprehensive university dedicated to excellence in teaching, scholarship and artistic achievement, and service. Through the College of Arts and Sciences, the professional schools, and the graduate school, the university seeks to stimulate intellectual curiosity, imagination, rational thinking, and thoughtful expression in a broad range of disciplines and professional fields. Of prime importance is the university's commitment to undergraduate teaching. The humanities, the arts, the natural and mathematical sciences, and the behavioral and social sciences comprise the core of the undergraduate curriculum. Graduate programs at the master's level and a doctoral program in marine biology complement the undergraduate curriculum. The university considers scholarly practice, research, and creative activities essential for effective learning.

UNCW encourages public access to its educational programs and is committed to diversity, international perspectives, community and regional service, and the integration of technology throughout the university. It strives to create a safe and secure environment in which students, faculty, and staff can develop interests, skills, and talents to the fullest extent. UNCW seeks to make optimum use of available resources and to celebrate, study, and protect the rich heritage, the quality of life, and the environment of the coastal region in which it is located.

THE UNIVERSITY OF NORTH CAROLINA AT WILMINGTON

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THE UNIVERSITY OF NORTH CAROLINA AT WILMINGTON

HISTORY AND BACKGROUND

Education on the college level first came to Wilmington in 1946 when a college center was established under the direction of the North Carolina College Conference and under the administration of the Directorate of Extension of the University of North Carolina at Chapel Hill. The center offered courses on the freshman level to some 250 students during the academic year 1946-47. In 1947 a tax levy was approved by the citizens of New Hanover County, and Wilmington College was brought into existence as a county institution under the control of the New Hanover County Board of Education. In 1948 Wilmington College was officially accredited by the North Carolina College Conference and became a member of the American Association of Junior Colleges. In 1952 the institution was accredited as a junior college by the Southern Association of Colleges and Schools.

In 1958 New Hanover County voted to place the college under the Community College Act of the state of North Carolina. By virtue of this vote, the college became a part of the state system of higher education, and control passed from the New Hanover County Board of Education to a board of 12 trustees, eight of whom were appointed locally and four of whom were appointed by the governor of the state. At the same time the requirements for admission and graduation and the general academic standards of the college came under the supervision of the North Carolina Board of Higher Education, and the college began to receive an appropriation from the state for operating expenses in addition to the local tax.

On July 1, 1963, by an act of the General Assembly of North Carolina, Wilmington College became a senior college with a four-year curriculum, authorized to offer the bachelor's degree.

By vote of the Board of Trustees of the University of North Carolina in late 1968, with subsequent approval by the North Carolina Board of Higher Education, and by an act of the General Assembly of North Carolina in 1969, Wilmington College became, on July 1, 1969, the University of North Carolina at Wilmington. It, and the institution in Asheville previously designated as Asheville-Biltmore College, became the fifth and sixth campuses of the University of North Carolina.

On October 30, 1971 the General Assembly in special session merged, without changing their names, the remaining ten state-supported senior institutions into the university. Thus, the University of North Carolina now comprises 16 institutions.

On August 22, 1977 the Board of Governors of the University of North Carolina authorized the University of North Carolina at Wilmington to offer its first graduate programs at the master's level.

In the spring of 1985 the Board of Governors of the University of North Carolina elevated the University of North Carolina at Wilmington to a Comprehensive Level I University.

The programs offered by the university include four-year programs leading to the Bachelor of Arts, Bachelor of Fine Arts, Bachelor of Music, Bachelor of Science and Bachelor of Social Work degrees within the College of Arts and Sciences, the Cameron School of Business, the Watson School of Education, and the School of Nursing; graduate programs leading to the Master of Arts, the Master of Arts in Teaching, the Master of Business Administration, the Master of Education, the Master of Fine Arts in creative writing, the Master of Public Administration, the Master of School Administration, the Master of Science, the Master of Science in Accountancy and the Master of Science in Nursing degrees; a Ph.D. in marine biology; a variety of pre-professional programs, and special programs in a variety of areas, including marine science research, and continuing education.

ACADEMIC STANDING

The University of North Carolina at Wilmington is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools (1866 Southern Lane, Decatur, Georgia 30033-4097: Telephone number 404-679-4501) to award degrees at the bachelor's, master's and doctoral levels. The Watson School of Education is accredited by the National Council for Accreditation of Teacher Education. The School of Nursing is accredited by the National League

for Nursing Accrediting Commission. The Cameron School of Business is accredited by the American Assembly of Collegiate Schools of Business. The university also holds membership in the North Carolina Association of Colleges and Universities, the American Assembly of Collegiate Schools of Business, the American Council on Education, the American Placement Council, the Consortium for Oceanographic Research and Education, the Council for Advancement and Support of Education, the Council of Graduate Schools, and the National Association of State Universities and Land-Grant Colleges. It is on the list of schools approved by the American Chemical Society and is an accredited institutional member of the National Association of Schools of Music. The Parks and Recreation Management curriculum is accredited by the National Recreation and Park Association/American Association for Leisure and Recreation. The Athletic Training Education Program is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP). The Bachelor of Social Work Program is accredited by the Council on Social Work Education.

Those wishing to review accreditation and certification documents should contact the Provost's Office.

THE FACULTY

The university seeks to attract and maintain a faculty of outstanding individuals who are capable of contributing to the enrichment of its diverse and comprehensive instructional and research programs. Its faculty members come from all geographic sections of the United States and several foreign countries, bringing to this campus a rich variety of educational experiences, training and scholarship. Of the more than 467 instructional and research faculty, more than 83.9 percent hold doctoral degrees.

BOARD OF GOVERNORS' AWARDS FOR EXCELLENCE IN TEACHING

As part of its ongoing efforts to underscore the importance of teaching and to encourage, identify, recognize, reward, and support good teaching within the university, the Board of Governors in 1993 created the annual systemwide teaching awards which are designated Board of Governors' Awards for Excellence in Teaching. Sixteen awards are given annually, with one recipient selected from each of the constituent institutions. The first awards were given in the 1994-95 academic year.

BOARD OF TRUSTEES' TEACHING EXCELLENCE AWARD

The Board of Trustees of the University of North Carolina at Wilmington, in recognition of this institution's commitment to teaching excellence, has established the Board of Trustees' Teaching Excellence Award. Recipients of the award manifest excellence as a way of life and stand out among the faculty as persons who have made and continue to make a significant contribution to higher education through their dedication and service to students. The award carries with it both an honor and a responsibility: it identifies a member of the faculty as a person of excellence, and it calls upon the person so honored to share that excellence with colleagues and students.

CHANCELLOR'S TEACHING EXCELLENCE AWARDS

The Chancellor's Teaching Excellence Awards recognizes all aspects of excellence in teaching and in teaching-related activities that foster students' desire for lifetime learning and success. Up to six awards are given annually , three for the College of Arts and Sciences, one for the Cameron School of Business, one for the Watson School of Education and one for the School of Nursing.

DISTINGUISHED TEACHING PROFESSORSHIP

The Distinguished Teaching Professorship Awards exemplify UNCW's commitment to excellence in teaching and in teaching-related activities by recognizing faculty members who have made a profound contribution to higher education through their dedication and service to students. Three awards are given each year, and each recipient holds the award for three years.

GRADUATE MENTOR AWARD

The Graduate Mentor Award recognizes members of UNCW's graduate faculty who have excelled at teaching at the graduate level and who have an established record of mentoring graduate students. The latter includes not only guiding the research activity of students during their tenure at UNCW, but also helping students become established as independent scholars and professionals.

THE UNCW AWARD FOR FACULTY SCHOLARSHIP

The UNCW Award for Faculty Scholarship is designed to underscore this institution's continuing commitment to scholarship and creative work. Recipients of the award stand out among the faculty as persons who have made, and continue to make, a significant contribution to the university and the academic community through their commitment to scholarship, research and creativity.

EQUAL OPPORTUNITY, DIVERSITY, AND UNLAWFUL HARASSMENT

REAFFIRMATION OF COMMITMENT TO EQUAL OPPORTUNITY

The University of North Carolina at Wilmington is committed to and will provide equality of educational and employment opportunity for all persons regardless of race, sex, age, color, gender, national origin, ethnicity, creed, religion, disability, sexual orientation, political affiliation, marital status, veteran status, or relationship to other university constituents – except where sex, age, or ability represent bona fide educational or occupational qualifications or where marital status is a statutorily established eligibility criterion for state-funded employee benefit programs.

This affirmation is published in accordance with 41 CFR Part 60 and is implemented in accordance with Title VII & Title IX of the Civil Rights Act of 1964, as amended; Executive Order 11246; the Rehabilitation Act of 1973; the Vietnam Era Veterans' Readjustment Assistance Act of 1974; the Civil Rights Restoration Act of 1988; and NC General Statutes Chapters 116 & 126.

To ensure that equal educational and employment opportunity exists throughout the university, a results-oriented equal opportunity/affirmative action program has been implemented to overcome the effects of past discrimination and to eliminate any artificial barriers to educational or employment opportunities for all qualified individuals that may exist in any of our programs. The University of North Carolina at Wilmington is committed to this program and is aware that with its implementation, positive benefits will be received from the greater utilization and development of previously under-utilized human resources.

STATEMENT ON DIVERSITY IN THE UNIVERSITY COMMUNITY

As an institution of higher learning, the University of North Carolina at Wilmington represents a rich diversity of human beings among its faculty, staff, and students and is committed to maintaining a campus environment that values that diversity. The university aims to achieve, within all areas of the university community, a diverse student body, faculty, and staff capable of providing for excellence in the education of its students and for the enrichment of the university community. The university defines diversity in the following ways: 1) The representation of populations shaped by historical circumstances and by cultural identities, or a combination of the two; 2) The representation of populations shaped by varying socio-economic circumstances.

UNLAWFUL HARASSMENT, DISCRIMINATION, AND RETALIATION

The University of North Carolina at Wilmington affirms that students and employees are entitled to an educational and employment environment free from unlawful harassment or discrimination based on that individual's race, sex, age, color, national origin, ethnicity, gender, creed, religion, disability, sexual orientation, political affiliation, marital status, veteran status, or relationship to other university constituents, and expressly prohibits unlawful harassment or discrimination of any individual among the university community engaged in educational or employment pursuits. Further, no student or employee shall be subject to retaliation for bringing a good faith complaint pertaining to unlawful harassment or discrimination or for protesting such behavior directed against another member of the university community.

For more information concerning ways in which our multicultural learning community may be nurtured and protected or complaint resolution procedures, contact the Chancellor's Human Relations Advisory Committee, the Office of Campus Diversity, the Office of the Dean of Students, the Office of Academic Affairs, or the Office of Human Resources.

SEXUAL HARASSMENT POLICY

The University of North Carolina at Wilmington is committed to ensuring that all students, faculty, and staff are treated with dignity and respect. Sexual harassment is highly detrimental to the environment of mutual respect that must prevail if the university is to fulfill its goals. Sexual harassment violates university policy and is illegal under state and federal law. All members of the

university community have an obligation to learn what behaviors constitute sexual harassment, be responsible for their own behavior, and cooperate in creating a climate where sexual harassment is not tolerated.

Sexual harassment is defined as: "Unwelcome sexual advances, requests for sexual favors, or other verbal or physical conduct of a sexual nature when such conduct

(i) constitutes an expressed or implied condition to another person's academic pursuits, university employment, or participation in activities sponsored by the university or organizations or groups related to the university; or

(ii) is engaged in for the purpose of interfering with such pursuits, employment, or participation; or

(iii) creates a hostile, intimidating, or offensive environment for such pursuits, employment, or participation."

Sexual advances or requests for sexual favors which are presented as a condition of another person's academic pursuits, university employment, or participation in university activities are always a violation of university policy — whether repeated or not. Behaviors which are not presented as a condition of another person's employment, education, or participation in university activities but which create a hostile, intimidating, or offensive environment generally must be repetitive and clearly unwelcome to constitute a violation of university policy.

Unwanted sexual attention can take many forms, including, but not limited to:

VERBAL: unwanted and repeated sexual remarks; offensive jokes about sexual or gender traits; sexual proposition; sexual insults, threats or bribes; sexual innuendoes or comments about a person's body, clothing, or activities; offensive written notes, phone calls, or e-mail.

NON-VERBAL: leering, whistling, suggestive or insulting gestures.

PHYSICAL: unwanted touching of a sexual nature (e.g., brushing, patting, pinching, fondling); coerced sexual activity.

Any of these could be considered sexual harassment, and, depending on the situation, fit into the following categories:

- Gender Harassment: statements or behaviors that insult or degrade another person on the basis of his or her gender or sexual orientation; repetitive, unwelcome physical or verbal sexual advances;
- Sexual Bribery: solicitation of sexual activity by promise of reward;
- Sexual Coercion: coercion of sexual activity by threat of punishment;
- Sexual Imposition: forced, unwanted sexual activity.

In sum, sexual harassment usually takes the form of explicit conditions pertaining to an individual's work or study (whether repeated or not) or unwanted and repeated behaviors of the type described above. Compliments, a one-time thoughtless joke, or inadvertent physical contact do not constitute sexual harassment. Individuals unclear as to whether a specific behavior is sexual harassment are encouraged to talk with the university EEO/AA officer, the dean of students, or one of the EEO/AA contact persons listed in the university telephone directory.

Sexual harassment is a serious matter. The university suggests several mechanisms, both informal and formal, for persons to make complaints, which may include bringing the matter to the attention of university officials. [See Administrative Review Procedure for University Members Alleging Personal Discrimination.] However, accusations of sexual harassment have serious consequences for the accused as well as the accuser; therefore, action will be taken against anyone bringing forth frivolous or false charges.

IMPROPER PERSONAL RELATIONSHIPS

Policy of the Board of Governors of the University of North Carolina Concerning Improper Relationships Between Students and Employees

The University of North Carolina does not condone amorous relationships between students and employees. Members of the university community should avoid such liaisons, which can harm affected students and damage the integrity of the academic enterprise. Further, sexual relationships between unmarried persons can result in criminal liability. In two types of situations, university prohibition and punishment of amorous relationships is deemed necessary: (1) When the employee is responsible for evaluating or supervising the affected student. (2) When the student is a minor, as defined by North Carolina law. The following policies shall apply to all employees and students of the sixteen constituent institutions.

A. Prohibited Conduct

1. It is misconduct, subject to disciplinary action, for a university employee, incident to any instructional, research, administrative, or other university employment responsibility or authority, to evaluate or supervise any enrolled student of the institution with whom he or she has an amorous relationship or to whom he or she is related by blood, law or marriage.
2. It is misconduct, subject to disciplinary action, for a university employee to engage in sexual activity with any enrolled student of the institution, other than his or her spouse, who is a minor below the age of 18 years.

B. Definition of Terms

1. "Amorous relationship." An amorous relationship exists when, without the benefit of marriage, two persons as consenting partners (a) have a sexual union or (b) engage in a romantic partnering or courtship that may or may not have been consummated sexually.
2. "Related by blood, law, or marriage" means:
   a. Parent and child
   b. Brother and sister
   c. Grandparent and grandchild
   d. Aunt and/or uncle and niece and/or nephew
   e. First cousins
   f. Step-parent and step-child
   g. Husband and wife
   h. Parents-in-law and children-in-law
   I. Brothers-in-law and sisters-in-law
   j. Guardian and ward
3. "Evaluate or supervise" means:
   a. To assess, determine or influence (1) one's academic performance, progress or potential or (2) one's entitlement to or eligibility for any institutionally conferred right, benefit or opportunity, or
   b. To oversee, manage or direct one's academic or other institutionally prescribed activities.

C. Corrective Action

Violation of the provisions of Section A shall be addressed in accordance with remedial measures prescribed by each constituent institution; if disciplinary action is brought against an affected employee, it shall be conducted in accordance with existing institutional policies and procedures prescribed for prosecuting misconduct charges against members of the class of employment of which the affected employee is a member.

Policy of the University of North Carolina at Wilmington

The UNCW Policy on Improper Personal Relationships applies to relationships among employees as well as to relationships between faculty and students.

"Improper personal relationships" as defined in this policy focuses on potential conflicts of interest, actual conflicts of interest, or the appearance of conflicts of interest related to supervision or evaluation of students or other university employees in the performance of duties. If the potential for such conflict arises, university employees involved in such relationships are required to disclose the possibility of any conflict of interest to their immediate supervisor (unless the immediate supervisor is the person involved in the conflict of interest, in which case the reporting line is to the next level of administrative authority) and to take immediate action to eliminate any potential source of conflict of interest. That is, university employees must recuse themselves of any official duty, which would create a conflict of interest or potential for conflict of interest. In such cases, university employees are encouraged to seek informal resolution of the matter with the help of the immediate supervisor (or appropriate administrative authority) by making alternate arrangements in which work tasks can be performed in the absence of any conflict of interest or potential conflict of interest.

If the matter cannot be resolved informally and if individuals knowingly continue in a supervisory or evaluative relationship in which such a conflict of interest exists, then those individuals shall be subject to disciplinary action up to and including dismissal from the university.

Anyone who believes that a violation of this policy has occurred is encouraged to refer the matter to the appropriate supervisory authority or to the university EEO/AA officer. In such cases, the appropriate administrator will implement a formal review process in accordance with university administrative review procedures for personal discrimination.

OPPORTUNITIES FOR INVOLVEMENT AND AVENUES OF REDRESS

For more information concerning ways in which our multicultural learning community may be nurtured and protected, contact the Chancellor's Human Relations Advisory Committee, the Office of Campus Diversity, the Office of the Dean of Students, or Human Resources.

For complaint processes and administrative review procedures pertaining to perceived violations of the university's policies pertaining to equal educational and employment opportunity, personal discrimination, sexual harassment, or improper personal relationships, see the *Code of Student Life* or the *Faculty Handbook* or contact the University EEO/AA Officer, UNCW Human Resources, 601 S. College Road, Wilmington, NC 28403-5960, Phone (910) 962-3160, Fax (910) 962-3840.

For questions concerning program access or compliance, contact the Compliance Officer, UNCW Chancellor's Office, 601 S. College Road, Wilmington, NC 28403-3297, Phone (910) 962-3000, Fax (910) 962-4050.

THE CAMPUS

The University of North Carolina at Wilmington is located in the southeastern part of the state on a 661–acre tract on State Highway 132 (College Road) midway between the Cape Fear River and the Atlantic Ocean. The city of Wilmington is situated on the east bank of the Cape Fear River and is about 15 miles from Carolina Beach and 10 miles from Wrightsville Beach. The standard metropolitan area, of which Wilmington is a part, now has a population in excess of 118,000. Several main highways lead into the city, and commercial air service provides easy access to other metropolitan areas north, south, and west.

Ocean breezes and the nearness to the Gulf Stream give Wilmington a delightful year-round climate, and the area's proximity to the ocean provides unlimited recreational opportunities.

The spacious well-landscaped campus was first occupied by the university in 1961. The number of buildings has increased from three in 1961 to 90 today. There are several athletic and intramural fields.

BUILDINGS

The buildings on the campus are of modified Georgian architecture. All academic buildings, as well as the dining and residence halls, are completely air-conditioned.

Edwin A. Alderman Hall, which houses administrative offices, is named in honor of a native Wilmingtonian who served as president of the University of North Carolina, the University of Virginia and Tulane University.

Hoggard Hall, an academic building named in honor of Dr. John T. Hoggard, second president of Wilmington College, houses the School of Nursing, the Office of Information Technology Systems, Accounting, Sponsored Programs, Center for Teaching Excellence, and faculty and staff offices.

Kenan Hall, named in honor of the late Mrs. Sarah Graham Kenan of Wilmington, is occupied by the Department of Art and Theatre and the Department of Music. It contains classrooms, faculty offices, art and music studios, the musical library, computer lab, dramatic workshops and the S.R.O. Theatre. It also contains an auditorium with seating capacity of approximately 100.

Will S. DeLoach Hall houses the Department of Physics and Physical Oceanography and the Department of Earth Sciences. It is equipped with classrooms, faculty and staff offices, teaching auditoriums, and laboratories.

Friday Hall, named in honor of UNC President Emeritus William C. Friday and his wife Ida, houses part of the Department of Earth Sciences and part of the Department of Biological Sciences, Science and Mathematics Education Center, Summer Ventures Program in Science and Math, and contains classrooms and laboratories.

Friday Annex provides interim space for buildings undergoing renovation and is currently home to University Relations.

Arnold Kimsey King Hall will provide temporary space during 2004–2005 while Hoggard Hall is undergoing renovation.

Cameron Hall houses the Cameron School of Business Administration.

Isaac Bear Hall contains the College of Arts and Sciences and the departments of Mathematics and Statistics and Philosophy and Religion.

Morton Hall, named for Margaret Shannon Morton, houses the departments of Creative Writing, English and History. The building contains classrooms, seminar rooms, and the Bryan Auditorium which seats 200.

The Social and Behavioral Sciences Building houses the departments of Psychology, Sociology and Criminal Justice, and Anthropology programs.

Dobo Hall, the largest academic building, contains the departments of Biological Sciences and Chemistry and Biochemistry. The building contains classrooms and laboratories.

Leutze Hall consists of 53,000 square feet and houses the departments of Communication Studies, Foreign Languages and Literatures, Political Science, Film Studies, and Social Work.

The Education Building houses the Watson School of Education, the Educational Resource Center, NC Teaching Fellows, NC Principal Fellows, the Professional Development System serv-

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Facilities	47
Facilities Trade Shops	50
Fine Arts Scene Shop	45
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Gazebo	33
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Graham Residence Hall	30
Hanover Hall Gymnasium	11
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Honors House	41
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Housing Warehouse	53
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James Hall (Admissions, Cashier, Financial Aid, Grad School, Registrar)	9
Kenan Auditorium	1
Kenan Hall	5
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University Apartments	32
University Police	48
University Suites	36
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Wagoner Hall (Dining)	39
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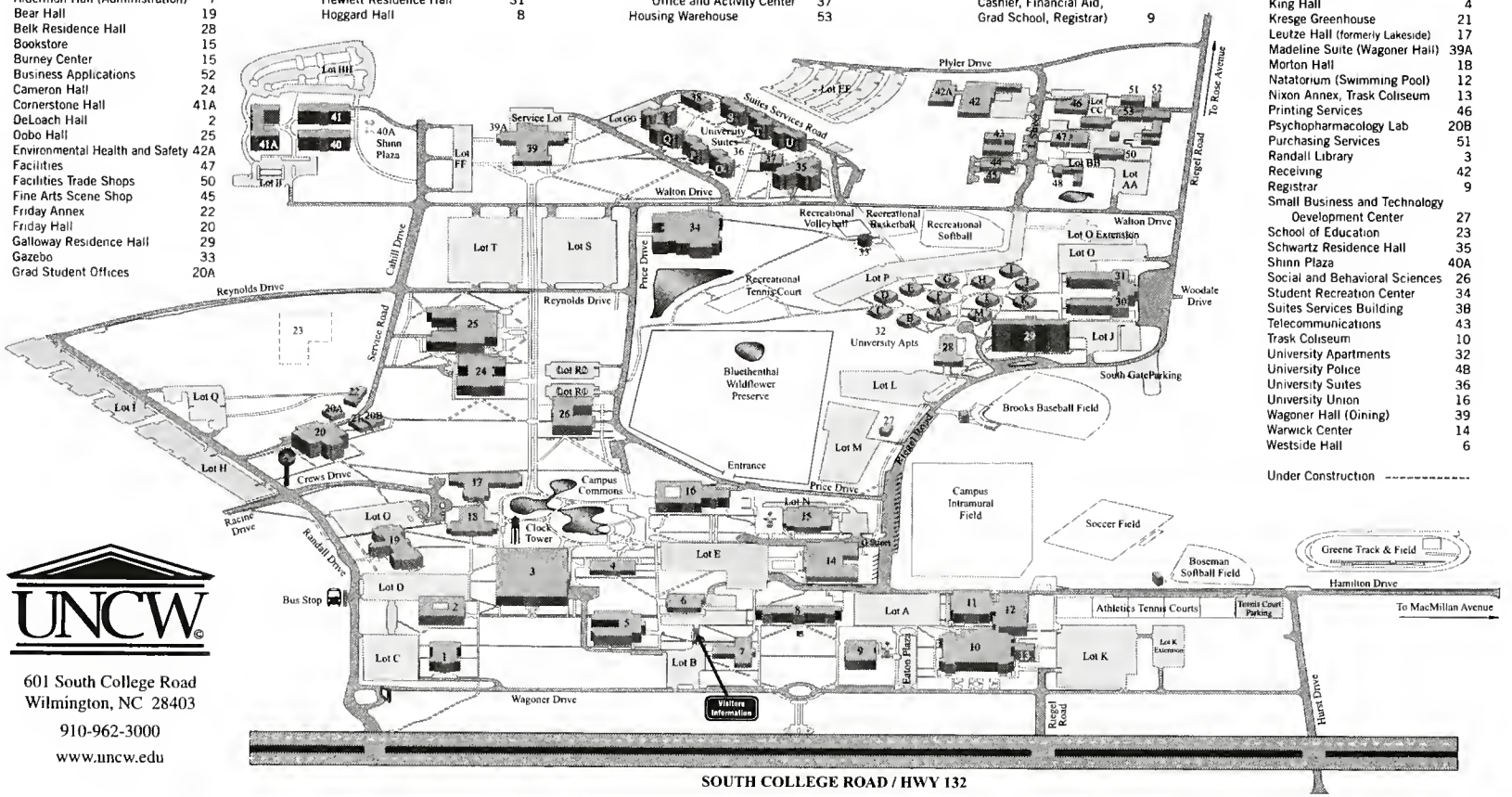
Under Construction ----------



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910-962-3000
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ing a ten county region, the Curriculum Materials Center, the Education Lab, and other support and outreach.

The Sarah Graham Kenan Auditorium, a gift from the Sarah Graham Kenan Foundation, has a seating capacity of 1,000 persons. The auditorium also is equipped for use as a theatre and contains seminar rooms for the Department of Music.

Hanover Hall and Trask Coliseum, the physical education complex, provide modern facilities for the athletic activities of all students, including a large playing floor with rollaway bleachers, a second athletic activity floor, offices, locker rooms and showers, and special gymnastic equipment.

The Raiford G. Trask Health and Physical Education Building provides the campus with a 6,000–seat coliseum as well as an olympic–size swimming pool and a separate diving tank.

The University Union is the "living room" of the university community. It houses a wide variety of services, student and administrative offices, while providing space for campus activities and meetings, Office of International Programs, and the Hawk's Nest dining facility.

The Warwick Center provides supplementary space to the University Union operation. In the building are housed the post office, the copy center, the game room, a grilled sandwich shop, and a large multi–purpose room which can be divided into as many as three smaller spaces. Areas of the multi–purpose room are available to the university community and the community at large for meetings and conference proceedings, etc.

Hinton James Hall, named for a New Hanover County resident who was the first student to enroll at the University of North Carolina, houses the Graduate School, Financial Aid Office, Registrar Services, Undergraduate Admissions, Cashier and Student Accounts.

The Burney Student Support Center, centrally located adjacent to the University Union, houses the University Bookstore and Institutional Research.

Wagoner Hall provides space for food service for students and faculty, and also houses a special purpose meeting and dining facility known as Madeline Suite.

Westside Hall contains Student Health Services, the Student Development Center, and the General College.

The Belk Residence Hall accommodates 200 students.

The Hewlett Residence Hall, named in honor of Addison Hewlett, Jr., accommodates 200 students and is joined by a connector building to the Frederick B. Graham Hall which accommodates another 220 students.

The Edmond R. Galloway Residence Hall provides housing for 400 students.

The Schwartz Residence Hall accommodates 160 students.

The University Apartments and University Suites each accommodate 400 students.

The Honors House is a living-learning environment for students enrolled in UNCW's Honors Program. The Honors House features a dynamic student population with members committed to student leadership, scholarship, and service. The Honors House provides housing for 100 students.

The International House is a living-learning environment for students who desire to experience world cultures in on-campus living. The International House consists of 96 spaces. The goal of the program is to have a 50/50 breakdown of international and American students living in close proximity together.

Cornerstone Hall provides on-campus housing for undergraduate students accommodated in a traditional dormitory setting of two- and three-bed rooms. The new building has been located to complete a cluster with two existing dormitories.

A campus recreation center is comprised of basketball and multipurpose courts, an extensive weight room, an aerobic and group exercise room, a climbing wall, an indoor running track, the Discover Outdoor Resource Center, Student Recreation Staff offices, and the University Wellness Center.

The Center for Marine Science, located on 56 acres approximately seven miles from the main campus, directly on the Intracoastal Waterway, houses classrooms, laboratories and research facilities as well as faculty offices and space for visiting researchers.

WILLIAM MADISON RANDALL LIBRARY

The William Madison Randall Library constitutes a vital instructional and research resource of the university. With seating provided for approximately 1,000 people, the library holds nearly two million items in various formats of which 800,000 are books, bound journals, and print government documents; 920,000 are microform pieces and more than 22,000 are multimedia items. In addition, the library offers extensive indexes and full text resources. These resources, including NC LIVE databases, Lexis-Nexis, Science Direct, JSTOR, and others provide access to indexing and full-text for thousands of journals and books. An online catalog and circulation system provides easy, efficient access to most of the library's collections. The library catalog is accessible on the World Wide Web at **http://library.uncw.edu**

The library's specialized collections include the Rare Book Collection, the Southeastern North Carolina Collection, devoted to publications about or written by residents of the Lower Cape Fear region of North Carolina, Manuscript Collections (diaries, correspondence and other papers,) UNCW and Wilmington College Archives, and the Curriculum Materials Center, a specialized facility designed to support the teacher education program of the Watson School of Education. The library is a selective depository for United States government publications, and a full depository for North Carolina documents.

Through its commitment to outreach Randall Library provides extensive facilities and services to members of the UNCW community. A knowledgeable and helpful staff of 39 full-time employees including 19 librarians and many student assistants provides extensive operating hours, professional reference and instructional services. In addition to these traditional services, the library prides itself on individual instruction and research assistance through its popular Drop-In Clinic program. Continuing to address the concerns of off-campus accessibility Randall Library offers extensive remote access to library services and resources. As a member of OCLC, Randall Library has national interlibrary loan and cataloging capabilities in addition to its cooperative relationships among the sixteen UNC system libraries.

Randall Library was originally built in 1969 and is named for William Madison Randall, Wilmington College president from 1958 to 1968. An addition and renovation project in 1986-87 doubled the size of the building. The library also houses the Honors Program Office, a Distance Learning Classroom, many faculty and graduate assistant offices, a computer lab for students, and a coffee bar.

HERBERT BLUETHENTHAL MEMORIAL WILDFLOWER PRESERVE

The Herbert Bluethenthal Memorial Wildflower Preserve is a 10 acre memorial botanical garden located on the UNCW campus. Established in 1972, its purpose is to provide a place where the university community and the public can learn about and enjoy our native plants and their habitats. Many of the plants are labeled, and maps and trail guides are available at the entrance.

EV-HENWOOD NATURE PRESERVE

Ev-Henwood is UNCW's coastal forest research and teaching station located in Brunswick County. It is only a short 30 minute drive from the university campus and is available for nature study and appreciation, student and faculty research, and class field trips. Included in its 110 acres are oak/hickory woods, pine forests, and low woods along the bordering Town Creek and its branches. Additional habitats such as ponds and fields are available nearby.

INFORMATION TECHNOLOGY

The Information Technology Systems Division is comprised of five service departments and one office: the Department of Application Services, Department of Audiovisual/Media Services, Department of Client Services, Department of Computing Services, the Department of Telecommunications and the Office of Web Management. The mission of the division is guided by the UNCW mission statement and by seven overarching goals, known as the UNCW "Technology Standards of Expectation." These seven standards are as follows: 1) To ensure access to the university's and the world's intellectual resources and provide the necessary aca-

demic and administrative systems to support learning; 2) To provide students with the essential technology skills they need to be successful in their chosen disciplines and as they enter their professional lives; 3) To create and sustain a supportive technology rich environment for students, faculty, and staff; 4) To provide technical support which allows for traditional and virtual access to courses and services; 5) To ensure that the institution is properly positioned for the future through life cycle support, controlled costs and new revenue sources; 6) To guarantee baseline standards for desktop and laptop configurations, PC replacement, network infrastructure, classroom technologies and enterprise software; and 7) To ensure a quality collaborative computing environment, core computing network and modern enterprise administrative systems.

The UNCW "Technology Standards of Expectation" were established to ensure that UNCW develops a technology-rich environment that can support and improve teaching and learning experience. To support students and faculty in achieving these goals, the university has developed an aggressive plan to create an environment where universal access and continued support for the use of technology are assured. By the fall of 2005, all classrooms will be connected to both the UNCW intranet and the Internet. A "Life Cycle Funding Plan" for computers along with baseline computer hardware and software standards, and a hypermedia baseline configuration will increase ease of use and cross-campus compatibility.

Students have access to eleven computer labs (Randall Library undergraduate lab, Schwartz Hall lab, Bear Hall lab, Science and Behavioral Sciences lab, graduate lab in Randall Library), with five 24X7 access labs (Belk Hall lab, Galloway and Graham/Hewlett Hall labs, Honors and International House labs) that are directly supported by the ITS division. These labs are complemented by dedicated labs that are operated by specific departments.

In response to the establishment of the "Mobile Computing Environment," the Information Technology Systems Division has set up "SEA Ports," or Student Ethernet Access Ports, which are accessible in high-use areas strategically located across campus. At these ports, students and faculty can use the university network in the comfort and convenience of the dining hall, student union or recreation center. Wireless "SEA Port" access has grown dramatically. Beginning with an initial pilot in the Randall Library, coverage has expanded into the Warwick Center, University Union, Bear Hall, Cameron Hall and Dobo Hall, and promises to be a network for the future. Wireless coverage on campus is currently at more than ninety percent. Randall Library and the University Union also provide laptop checkout/wireless access to the network through the ITSD's Laptop Checkout Program allowing students greater flexibility in the learning environment. ITSD is committed to assuring students have access to high quality networks and useable support systems for training and information. This effort is continually improved upon by conducting scheduled surveys that ask students their level of satisfaction with information technology goods and services.

Each year greater emphasis is being placed by the faculty upon student utilization of computing facilities. Every department on campus uses computing in some aspect of its daily activities. Students at UNCW are expected to assimilate computing skills as an integral part of their campus life.

Through the Client Services Department in the Information Technology Systems Division an array of support services exists, including faculty instructional and research support, microcomputer support, computer training, and help desk services. An expanded IT Help Desk, referred to as the TAC, Technology Assistance Center, is located in Hoggard Hall and provides students with technical assistance regarding information technology. The student UNCW/Laptop contract ensures that students can purchase high quality laptops at a price which is among the lowest in the nation. ITSD also coordinates the common look and feel of Web-based services, online navigation architecture and Web server support for the university through the Office of Web Management. All of these services combine to create a continuous support environment for faculty, staff and students.

The central computer system, which handles campus-wide applications, operates under Open VMS and offers access to statistical packages, language compilers and electronic mail. The Department of Computing Services manages these systems. A number of servers based on the

Windows platform and other operating systems support various centrally located and distributed functions as well

The university has a high-speed fiber optic campus data network, which provides access to the Internet, central servers, departmental LAN's, the Randall Library online catalogue and two-way interactive classrooms.

The Information Technology Systems Division is also responsible for providing hypermedia and audiovisual assistance for classrooms as well as special events. The director of the Department of Audiovisual Media Services coordinates these activities. This office also supports two classrooms that are fully interactive with hypermedia capability as part of the UNCW Distance Learning Initiative.

All telecommunication, cable, and satellite services are provided through the Department of Telecommunications. Other programs supported by the Information Technology Systems Division are the Information Technology Innovation Awards and the Web Course Development Team, which develops online for-credit courses. The Information Technology Systems Division provides or coordinates all of these services in partnership with technical personnel, students, staff and faculty throughout the campus. For additional information see our Web page at www.uncw.edu/itsd.

DIVISION FOR PUBLIC SERVICE AND CONTINUING STUDIES

The Mission

The Division for Public Service and Continuing Studies was created to strengthen the university's commitment to the diverse region it serves. Since its inception, the Division has been an innovator for numerous initiatives on and off-campus providing off-campus instruction, sharing resources in information technology, setting up a community network for nonprofit organizations, providing community access educational television, sponsoring a venue to honor outstanding contributions from North Carolinians, customizing online professional development courses, furnishing and managing an executive development conference facility, designing civic leadership programs, offering professional services to an array of new and developing businesses, and other similar endeavors.

The division seeks both internally, and externally, to use knowledge, time and talent to build connections to enrich the lives of others. The division strives to be a catalyst for positive social changes. As stated by Elizabeth Hollander, executive director of Campus Compact, "The engaged campus, like the service-learning student, recognizes that knowledge cannot be separated from the purposes to which it is directed. The engaged campus is not just located within a community, it is intimately connected to the public purposes and aspirations of community life itself. The engaged campus is unable to separate its unique responsibility for the development of knowledge, from the role of knowledge in a democratic society to form the basis for social progress and human equality." (http://www.compact.org/advancedtoolkit/defining.html)

The division also works to enhance university-community partnerships that are two-directional, providing the community access to the resources of the university and the university the opportunity to work with partners to solve regional problems.

DEVELOPMENT OF REGIONAL PARTNERSHIPS

The division develops regional partnerships to improve the quality of life in southeastern North Carolina and assist economic development. These partnerships include:

Celebrate Wilmington!

A partnership between the community and the university was begun in the mid-1990s to provide a year-long marketing effort for art and cultural offerings. Entitled *Celebrate Wilmington!*, it features a monthly arts calendar as well as a Walk of Fame to recognize Wilmingtonians who have attained national and international fame. Inductees include professional football player Roman Gabriel, visual artist Minnie Evans, preservationist Hugh Morton, architect Henry Bacon, film

maker Frank Capra, Jr., opera soprano Caterina Jarboro, journalist and novelist Robert C. Ruark, tennis great Althea Gibson, journalist David Brinkley, and singer/songwriter/musician Charlie Daniels, jazz musician and Tuskegee Airman Percy Heath, artist Claude Howell, International Banker/Golfer Isaac B. Grainger and professional football player Sonny Jurgensen.

Each year, *Celebrate Wilmington!* also recognizes a local person who has contributed to the cultural life of the region with the annual Lifetime Achievement Award in the Arts.

Community Outreach Services (COSMOS)

Through Community Outreach Services (COSMOS), the division provides information technology services to southeast North Carolina.

COSMOS' creates innovative processes and services to fulfill the university's extension education mandate, serves as the outreach vehicle for technology-mediated programming and builds on its long history of innovative partnerships. COSMOS offers direct to web programs and training seminars through on-line certificate programs, noncredit education courses, and workshops. It also works with corporations and other educational or governmental units to foster programming alliances, partnerships, and grant activities.

Web@UNCW

In an effort to meet Southeastern North Carolina's growing needs for just-in-time education, the division developed WebU@UNCW. More than traditional, in-seat training, WebU@UNCW utilizes the latest, more successful Internet-based learning courses to provide on-the-go professionals with the training they need to remain competitive and excel—anytime, anyplace.

Entering its fifth year and offering more than 600 courses and 70 certificate programs, WebU@UNCW continues to gain popularity as professionals from Southeastern North Carolina and around the globe embrace Internet-based learning as a new tool to continue their professional development.

WebU@UNCW also caters to an international audience, partnering with content vendors that specialize in English as a Second Language, supporting Chinese, French, German, Italian, Japanese, Korean, Portuguese, and Spanish. Participants live in the United Kingdon, Canada, South America and South Africa.

For more information concerning WebU@UNCW, visit the web site, www.uncw.edu/dpcs/webu, e-mail webu@uncw.edu, or call (910) 962-7074.

UNCW-TV and The Learning Network (TLN)

The division oversees UNCW-TV whose mission is to provide educational programming. To accomplish this, UNCW-TV partners with Cape Fear Community College and New Hanover County Schools in association with Time Warner Cable, to form The Learning Network of the Cape Fear. The network is managed by UNCW and broadcasts 24-hours a day, seven days a week on SCTC cable channel 5. In addition to original award-winning UNCW-TV productions, such as "Let's Read!" "UNCW & You," the university also broadcasts the award-winning "Classic Arts Showcase," an Annenberg Foundation series and telecourses+.

CONTINUING EDUCATION

Continuing education includes youth and adult marine science programs, conference and professional development, and lifelong learning that includes non-credit activities for retirees and working adults, and contract training for companies.

MarineQuest

Under the aegis of continuing education, the division offers various programs for youth ages 4-18 and adults. Its MarineQuest Program focuses on marine and environmental studies. The Center for Marine Science furnishes an opportunity for increased public service programs for teachers and students from North Carolina and other states.

Lifelong Learning

The division offers a variety of non-credit lifelong learning programs for adults that vary from art, to fiction to investment planning. In addition, the Tabitha Hutaff McEachern Lifelong Learning Speaker Series of lunches and dinner programs features entertaining and educational offerings. The UNCW Adult Scholars Leadership Program as well as Leadership Wilmington provide participants with an in-depth look at the community's problems and solutions and encourage participants to volunteer to improve the quality of life.

Conferences

Conference planning and hosting are a primary way through which the university, through its Division for Public Service and Continuing Studies, administers its public service mission. UNC Wilmington provides a complete conference package with lodging, meeting rooms, food and staff to assist with conference registration needs and manages the UNCW Executive Development Center offsite. The center offers corporate and community groups a state-of-the-art facility to accommodate their educational and training needs including first class training rooms, an executive board room, a theater-style seminar room, a large meeting hall as well as a full range of catering and conference services. The EDC is designed to accommodate groups of various sizes and needs from the intimate setting of the board room to the large meeting hall, which can seat 200. The training rooms are tailored for flexibility with seating for 40 to 100 participants. The tiered seminar room provides maximum opportunity for interaction as well as comfort. For information call (910) 962-3546 or visit our web site at www.uncw.edu/edc.

Small Business and Technology Development Center (SBTDC)

The Small Business and Technology Development Center is a business development service of The University of North Carolina system that provides management counseling and education services to small and mid-sized businesses in all of North Carolina's 100 counties. The SBTDC at UNCW provides services in New Hanover, Pender, Onslow, Duplin, Brunswick, Bladen and Columbus counties. The Center helps established firms, high-growth companies and start-up businesses meet today's challenges, manage change, and plan for the future.

Services are well defined and are designed to meet clients' needs:

- Our primary focus is management counseling, addressing issues including financing, marketing, human resources, operations, business planning, and feasibility assessment.
- We also provide targeted, research-based educational products that are focused on change management, strategic performance, and leadership development for your management team, employees, and board members.
- In addition, we offer specialized market development assistance in:
    - government procurement
    - international business development/exporting
    - marine trades services
    - technology development and commercialization.

For those thinking about starting a business, the SBTDC at UNCW offers a Pre-Venture Orientation (PVO) program on a regular basis. This two-hour class offers an excellent overview of the first steps in starting a business, obtaining financing and business planning. There is no fee for to attend the program.

North Carolina Marine Trades Services

Marine Trades Services is a statewide North Carolina program offering business assistance and counseling for the marine industry. No cost business assistance is offered to marinas, boat builders, repair services, marine construction firms, and boat dealers and includes help with regulatory and permitting issues, new business feasibility, finding sources of capital, marketing

strategies, cash flow analysis, sales to municipal, state and federal agencies, international export, and new product/technology marketing. The program also serves as a new business development resource for the Department of Commerce.

For more information about the Division for Public Service and Continuing Studies, call (910) 962-3351.

Industrial Extension Services

The Industrial Extension Services (IES) at North Carolina State University serves small and mid-sized manufacturing companies in North Carolina. The range of services includes quality and performance excellence, Lean Manufacturing, industrial energy efficiency, industrial engineering, HR assessments, on-site consulting and continuing education courses. The IES maintains an office at the offices of the Small Business and Technology Development Center (SBTDC) at UNCW.

CENTER FOR BUSINESS AND ECONOMICS SERVICES

The Center for Business and Economics Services in the Cameron School of Business at the University of North Carolina at Wilmington is the business research/extension division in the business school. Center staff provide research services and sponsor seminars to provide technical assistance in regional economic development and prepare individuals to develop further their managerial, technical, and personal capabilities.

CENTER FOR MARINE SCIENCE

The Center for Marine Science at the University of North Carolina at Wilmington is dedicated to interdisciplinary approaches to questions in basic marine research. The mission of the center is to promote basic and applied research in the fields of oceanography, coastal and estuarine studies, marine biology, marine chemistry, marine geology, marine biotechnology and aquaculture. Faculty members conducting marine science research in the departments of Biological Sciences, Chemistry, Earth Sciences and Physics and Physical Oceanography participate in this program. Center faculty serve on regional, national and international research and policy advisory groups and thereby contribute to the development of agendas on marine research in the United States and the world. International interactions with labs in Europe, North America, South America, Australia, New Zealand, Asia, Africa, Bermuda, the Bahamas and Caribbean, and all regions of the coastal United States augment extensive programs addressing North Carolina coastal issues. By integrating these advisory functions with research programs of the highest quality, CMS enhances the educational experience provided by the University of North Carolina at Wilmington for both undergraduate and graduate students in marine science.

The Center for Marine Science occupies a research and education facility located six miles from the main campus on the Atlantic Intracoastal Waterway. The new Marine Science Center at Myrtle Grove has a total of 75,000 square feet of net indoor space including: group meeting facilities for up to 150 individuals; fully equipped research laboratories, classrooms, and marine science laboratories; a greenhouse with running seawater; a radioisotope laboratory; computer workrooms, cold rooms, walk-in freezers; temperature controlled rooms; autoclave and media preparation room; darkroom; chemical storage and balance rooms; fireproof vault for data storage; clean room; central analytic facility; sample processing rooms; aquarium room with running seawater; indoor storage; outdoor storage; shower/locker facilities; and outdoor facility for tanks with running sea water. Core facilities include: harmful algal identification and toxicology; nutrient analysis; DNA sequencing; and NMR spectroscopy. A 900 foot pier with docking facilities for several coastal research vessels is in place on the Atlantic Intracoastal Waterway. The seawater system provides raw, filtered, and purified seawater at flow rates up to 600 liters/min; tank farm services; and aquarium room services. The location of the new center provides easy access to regional marine environments such as: tidal marshes/mud flats/sand flats; tidal creeks; barrier islands and tidal inlets; the Atlantic Intracoastal Waterway; near shore marine environments; the Gulf Stream; hard bottom communities; and dunes and maritime forests; and both highly developed

and minimally developed estuarine environments. The center maintains 15 research vessels ranging in size from thirteen to sixty-five feet and specialized equipment including a Superphantom Remotely Operated Vehicle (ROV), an ocean environmental sampler (SBE-CTD), and an ADCP current profiler.

The Center for Marine Science serves as host for: the NOAA sponsored National Undersea Research Center; an Extension Office for North Carolina Sea Grant; the Marine Mammal Stranding Network; the North Carolina National Estuarine Research Reserve; and UNCW's MarineQuest Program which is an extensive community outreach program for public schools and adult education.

CENTER FOR TEACHING EXCELLENCE

The Center for Teaching Excellence at the University of North Carolina at Wilmington is dedicated to assisting the university in fulfilling its commitment to strengthening undergraduate and graduate instruction. The center recognizes that excellence in teaching is achieved through teaching scholarship, which involves continuous scrutiny of course content and methods of instruction, knowledge of modern educational techniques and practices, and analysis of the effects of different teaching methods on student learning. Developing new courses and improving existing ones are fundamental to maintaining the integrity and vitality of the university's educational programs.

The mission of the Center for Teaching Excellence is to foster a campus-wide climate where teaching is highly valued, as well as provide leadership in the application of scholarship to teaching. The center assumes that the primary responsibility for developing and improving educational programs resides with the faculty who, as teacher/scholars, possess both the knowledge of the disciplines and the skills to evaluate and implement effective instructional practices. The center encourages efforts to achieve excellence in teaching by running programs for course development and improvement, implementing new instructional technologies, and providing support services.

In order to further enhance the resources of the Center for Teaching Excellence and to increase opportunities for professional development in teaching for UNCW faculty, CTE participates in a variety of resource-sharing consortia, both formal and informal within the University of North Carolina system. In addition, CTE participates in statewide and national associations that support the mission of improving higher education through professional development in teaching.

Examples of the center's services are:

1. assistance with course design and learning assessment,
2. specialized workshops and seminars on teaching and learning for faculty at all levels of expertise,
3. discipline-based teaching circles,
4. assistance in development of instructional technology methods,
5. summer salary support for pedagogy development,
6. participation in UNC system-wide teaching development incentives,
7. publication of a world wide web page at http://cte.uncw.edu,

The mission of the center is specifically supportive, and participation by the faculty is entirely voluntary. The interaction between center personnel and the faculty is confidential and separate from any formal assessment process of the university.

THE UNCW ALUMNI ASSOCIATION AND THE OFFICE OF ALUMNI RELATIONS

The UNCW Alumni Association represents over 42,000 alumni worldwide and operates out of Wise Alumni House, located next to our chancellor's residence on Market Street. This off-campus facility was built in 1908-09 and was recently restored to its former grace and style. Efforts are continuous to maintain this elegant facility.

The alumni association creates programs to connect alumni to UNCW and to each other. Alumni Relations staff coordinates educational, service and social activities; provides loyalty to UNCW throughout the region, state, nation, and the world.

Volunteers have the opportunity to represent their class, school, chapter, or student organization by serving as a member of the governing leadership board of directors. All alumni are automatically members of the association. An "active" alumnus is one who has a current mailing address on file, contributes annually to UNCW and participates in alumni activities. We encourage all alumni to become active and help ensure UNCW's place among the best universities in the USA.

STUDENT LIFE

DEAN OF STUDENTS

The Office of the Dean of Students serves as the primary focal point for addressing student needs, issues and concerns and serves as a resource and referral office for all faculty, staff and students. The primary goals of the office are to provide assistance, conflict resolution, advocacy and personal advising for the promotion of student success. Throughout an academic career there are times when life at UNCW may sometimes seem overwhelming or you feel the need for help and direction. Every student should feel welcome and supported by the staff of the Office of the Dean of Students. We are available for clarification of university policy and procedures, confidential consultations, assistance with personal and family crisis, initiating formal academic grievances and identifying appropriate referrals to campus services.

As part of the Division of Student Affairs, the Office of the Dean of Students advises the Greek Affairs system; supervises the commuter and non-traditional student center; oversees the Office of Orientation and Transition Programs; publishes the Code of Student Life; administers the student judicial system, including violations of the Academic Honor Code; serves as liaison to the Council of Campus Ministries; and coordinates with University Police all crisis intervention and emergency response strategies. In addition, the Office of the Dean of Students provides educational programs and services on sexual assault and sexual harassment awareness and prevention, values education and character development. The Office of the Dean of Students assists the Office of Affirmative Action in processing cases of discriminatory personal conduct, including sexual harassment.

ASSOCIATION FOR CAMPUS ENTERTAINMENT

The Association for Campus Entertainment (ACE), coordinates many of the events that take place on campus including the Friday night film series, open mic nights, concerts and comedy shows and a series of homecoming events. This student run organization is made up of the following committees: Port City Comedy, Concerts, Homecoming, Springfest/Fallfest, Spirit, and Contemporary Culture. Over 150 students participate in the coordination of ACE events and learn skills such as negotiation, marketing, delegation, time management, and program planning. If you are interested in more information about events or joining a committee, stop by the ACE office in the University Union room 205, Involvement Center.

ATHLETICS

The university holds membership in the National Collegiate Athletic Association, Colonial Athletic Association, and the Eastern College Athletic Conference. Varsity intercollegiate teams are fielded for men in basketball, cross country, baseball, golf, soccer, tennis, swimming and diving, and indoor/outdoor track and field. Varsity intercollegiate teams for women are fielded in basketball, cross country, softball, golf, tennis, swimming and diving, soccer, volleyball, and indoor/outdoor track and field.

Mission Statement

The mission of the Department of Athletics, based upon and consistent with the purpose of the university, is to encourage student scholarship and sportsmanship with emphasis placed on helping students make appropriate progress towards completion of their chosen academic degree program. Academic integrity is a basic element of athletic programming decisions, thus insuring that the educational values, practices, and mission of UNCW set the standards for the program. UNCW's athletic program is characterized by its quest for student excellence in competition and in the academic setting. The university is committed to continually improving the program, which is an integral part of campus life and a university focal point for building student and regional involvement and support. The Department of Athletics provides opportunities for students to utilize their athletic skills through competition at the appropriate intercollegiate level and to have the university represented by men and women whose conduct and sportsmanship reflect

positively on the institution. It seeks to field disciplined and competitive athletic teams dedicated to observing applicable rules, to provide quality athletic training and medical support to intercollegiate athletes, and to support the general welfare of student-athletes. UNCW Athletics works to foster a sense of personal responsibility by those who attend athletic events. The program insists upon a high ethical code of honor and respect from each of its athletes and personnel and adheres to the policies, rules, and guidelines of the National Collegiate Athletic Association, the Colonial Athletic Association, and the institution. The Department of Athletics is committed to complying with Title IX regulations and the promotion of affirmative action goals, emphasizing the recruitment of and opportunities for women and minority employees and student-athletes.

The Equity in Athletics Disclosure Act report is available upon request.

Vision Statement

The University of North Carolina at Wilmington strives to provide students with a wholesome environment of athletic competition, high quality coaches, dedicated support staff and the administrative personnel to help them become better athletes, students and citizens.

CAMPUS ACTIVITIES AND INVOLVEMENT

The Campus Activities and Involvement Center is your gateway to entertainment and involvement on campus. As part of the Division of Student Affairs, we are "creating experiences for life" by providing opportunities for students to participate actively, grow personally and explore new ideas and interests through a variety of entertainment and involvement experiences. Our staff, and the students with whom we work, are committed to creating a vibrant campus community filled with diverse activities for all students. Activities produced by the center include the Arts in Action performance series, the Leadership Lecture series, Midnite Madness, the Intercultural Festival and UNCWelcome. Check out the monthly activities calendar to find out ways of getting involved in the UNCW community.

CAMPUS DIVERSITY

The Office of Campus Diversity fosters an educational climate that promotes the academic and personal development of students from under-represented groups and assists them with their progress towards degree completion. The Office of Campus Diversity, including the Upperman African American Cultural Center, provides minority students with avenues for inclusion and involvement in the total university community. It provides programs of diversity and multicultural education to minority and non-minority students, faculty, staff, and community members throughout the year. The programs include educational seminars and workshops as well as appearances by national and international performers in art, film and music, and speakers on topics such as civil rights, journalism, literature, and politics. All students, faculty, and staff are encouraged to participate in the events and programs sponsored by the Office of Campus Diversity and the Upperman Center. Visit the web site at www.uncw.edu/diversity.

CAMPUS RECREATION

The Department of Campus Recreation organizes and administers a variety of structured and self-directed recreational services that enhance the overall wellness of the university community. Our primary goal is to provide quality recreational experiences directed toward positive change in the physical, cognitive and social domains of the university community thus enhancing the overall educational experience. This goal is accomplished by offering a wide variety of recreational activities, conducting educational workshops and providing professional training for employees. The Department of Campus Recreation provides a multi-faceted program, which includes: Group Exercise/Fitness Programs, Intramural Sports, Discover Outdoor Programs, Sport Clubs, and Special Events. Campus Recreation at UNCW takes a "something for everyone" approach to programming.

Discover Outdoor Center

Discover Outdoor Center uses outdoor adventure recreation to provide the UNCW community with opportunities for healthy and exciting leisure pursuits, leadership development, and team building. Operating as a component of the Department of Campus Recreation, the center offers low-cost opportunities to experience and learn about many enjoyable lifelong outdoor activities through adventure trips, the UNCW Challenge Course, outdoor equipment rentals, outdoor leadership training, the Student Recreation Center Climbing Wall, outdoor skills workshops, and kayak clinics.

CAREER SERVICES

The central purpose of Career Services is to prepare students for academic and career success. The center assists with self-assessment, values clarification and occupational data to help students make informed career choices. Career Services also provides opportunities for internships, and discovering the relationship of skills acquired to the broader work world. Career Services helps graduating students translate their academic achievements, co-curricular activities and work experiences into successful job campaigns or additional graduate school applications. For more information, visit Career Services on the internet at: http://www.uncw.edu/stuaff/career.

CENTER FOR LEADERSHIP EDUCATION AND SERVICE

The Center for Leadership Education and Service provides programs and resources designed to inspire the development of leadership knowledge and skills while nurturing an individual's sense of responsibility for engaged citizenship. We believe that leadership and service go together.

The center develops student leaders through leadership development programs and service opportunities that are responsive to community needs. An emphasis is placed on enhancing personal skills, social consciousness and character development which all have a lasting impact on a student's life-long journey in an ever changing society.

Some of the leadership programs and service opportunities include: EMERGE, leadership film discussions, Women in Leadership Mentoring Program, Leadership UNCW, LEAD Consultants, Seahawk Surges, alternative fall and spring break trips, Halloween Carnival and the UNCW Kids program.

COUNSELING CENTER

The staff of the Counseling Center believes that a student's successful progress towards their degree is impacted by a number of personal, social, and academic factors. To assist this progress, we offer a variety of services including individual personal counseling, group counseling, and personal development workshops. In addition, consultation services and outreach programs are offered for student organizations, as well as other campus departments and offices. Our primary goal is to assist students in completing their degree while developing a greater understanding of themselves in relation to others and their environment.

Common concerns include loneliness, depression, anxiety, sexuality, homesickness, relationships, family issues and grief. In addition, assistance is available for students with concerns related to sexual assault, substance abuse, and eating/body image. The Counseling Center is staffed by counselors, psychologists, and supervised graduate students, all of whom have specific interests and skills in working within a university setting.

Services are confidential, free, and accessible. Regular walk-in hours are available and after-hours emergency coverage is provided through the University Police dispatch service. When other counseling resources would better serve the needs of a student, referrals to off-campus professionals and agencies are provided. Students are encouraged to make use of our varied services to assist them in managing their "hassles" as well as their more complex concerns. The Counseling Center is a partner with others in campus community to promote student success through quality programs and services.

CROSSROADS: UNCW Substance Abuse Prevention and Education Program

CROSSROADS, UNCW's Substance Abuse Prevention and Education Program, located on the second floor of Westside Hall has extensive and up-to-date resource materials available about alcohol, tobacco and other drugs and their effects, as well as information about how to help yourself, a friend, or someone else who may have a problem with substance abuse. Materials are free of charge and some are available on loan. CROSSROADS provides educational sessions, conducted by program staff and peer educations, to faculty and staff, students, clubs, organizations, and residence life groups. Topics include information about health risks, decision-making, high risk-alcohol and other drug use, smoking cessation, and responsible party planning. Whether you have questions about drugs for personal reasons, academic assignments or a group project your interest will be handled in a confidential and nonjudgmental manner.

For more information contact CROSSROADS at 962-4136, e-mail us at crossroads@uncw.edu or stop by the office in Westside Hall.

DISABILITY SERVICES

The University of North Carolina at Wilmington is open and accessible to students with disabilities. We are committed to providing assistance to enable qualified students to accomplish their educational goals, as well as assuring equal opportunity to derive all of the benefits of campus life. Disability Services has devoted much energy to meeting the requirements of Section 504, Federal Rehabilitation Act, and the Americans with Disabilities Act. In addition, this office serves as a full-time advocate for students with disabilities, as well as a resource for faculty, staff and administration. Students needing accommodations should contact the director of disability services and provide appropriate documentation of the disability.

FOOD SERVICE

The UNCW Food Service operation is committed to providing quality food products served in clean and comfortable facilities. The program is available to all students, faculty, and staff seven days a week when classes are in session. Wagoner Dining Hall, built in 1989, is a 600–seat facility that serves unlimited seconds on every meal. Cash operations include: The Hawk's Nest, located in the University Union; a pizza delivery program; and a convenience store located in Apartment Building M.

Information about commuter student meal plans is available at the Auxiliary Services Office in the Warwick Center (962-3560).

HEALTH PROMOTION & NUTRITION SERVICES

Health Promotion & Nutrition Services is located in the Student Recreation Center, and provides complementary services and incentive programs designed to enhance and balance an individual's commitment to their personal health and well-being goals.

The Hundley Health Education Resource Center provides access to resources such as: individualized computer health risk assessments with personal consultations, portable compact disc players with motivational recordings available for check-out while exercising at the center, blood pressure checks, and an expansive library of journals and books for personal use and academic needs.

Health education staff offers programs on stress management, cancer prevention, sexual health, and other health/promotion topics. Nutrition Services staffs a registered dietician who provides individual counseling as well as programs on weight management, disease prevention management, sports nutrition, eating disorders, and other nutrition concerns.

HOUSING AND RESIDENCE LIFE

The Office of Housing and Residence Life is responsible for the development of educational, cultural and social programs to enhance student life on campus. The goal of the Housing and Residence Life program is to create an environment conducive to the academic pursuits and personal growth of resident students. More than 55 Residence Life staff are responsible for the

supervision of resident students in the residence halls, on–campus apartments, and suite–style buildings.

The university has residence hall facilities for approximately 2,360 students in eight modern, conveniently located residence halls, 13 apartment buildings, and seven suite–style buildings. All rooms are air–conditioned and furnished. Ethernet computer networking, which allows student computers to access university software, has been installed in all residential facilities. Laundry facilities are located in each residence area. The Residence Life program offers opportunities for student employment and leadership positions through hall governance. Students living on campus are required to participate in the university dining hall program.

IMMUNIZATION AND HEALTH FORMS

North Carolina General Statute 130A, 152-157, establishes specific immunization requirements for all students enrolled in N.C. colleges or universities. It is the responsibility of the Student Health Center to monitor the immunization record of each student to ensure compliance with state law.

All UNCW students are required to submit to the Student Health Center a complete and up-to-date immunization record.

Student medical forms required for physical education participation will also be collected at the Student Health Center.

Immunizations that are REQUIRED pursuant to NC state law.

Immunization policy: North Carolina Immunization Requirements for all students entering a four-year university.

Standard: The Student Health Center will follow North Carolina General Statue (G.S. 130A – 152 through 157).

Students 17 years of age or younger .....REQUIRED:

- 3 DTP (Diphtheria, Tetanus, Pertussis) or TD (Tetanus, Diphtheria) doses within the past 10 years
- 3 Polio doses
- 2 Red Measles (Rubeola), 1 Mumps, 1 German Measles (Rubella) (MMR is preferred vaccine)

Students born in 1957 or later and 18 years of age or older .....REQUIRED:

- 3 DTP (Diphtheria, Tetanus, Pertussis) or TD (Tetanus, Diphtheria) doses within the past 10 years
- 2 Red Measles (Rubeola), 1 Mumps, 1 German Measles (Rubella) (MMR is preferred vaccine)

Students born before 1957 .....REQUIRED:

- 3 DTP (Diphtheria, Tetanus, Pertussis) or TD (Tetanus, Diphtheria) doses within the past 10 years
- 1 German Measles (Rubella)

Students 50 years of age or older .....REQUIRED:

- 1 TD (Tetanus, Diphtheria) dose within the past 10 years

International Students .....REQUIRED:

- In addition to the above age requirements, students from some countries will be required to have a PPD (Tuberculin Skin Test) or documentation of a negative chest x-ray within the last year.

Note:
Laboratory proof of immunity to German Measles (Rubella) Red Measles (Rubeola) or Mumps is acceptable.
All students must sign the MENOMUNE WAIVER on the Immunization Form.

Failure to comply with North Carolina immunization requirements will result in administrative withdrawal from the university.

NATIONAL TESTING PROGRAM

The National Testing Program, in cooperation with Educational Testing Service and the Psychological Corporation, coordinates the administration of national certification and admissions exams. The Computer-Based Testing Center offers the following exams: CLEP, GMAT, GRE, NET, Praxis I Series, TOEFL, NBPTS and MPJE. Paper-based testing is also available for the Praxis I and II Series, GRE subject exams, LSAT and MAT by pre-registration. Testing accommodations can be made by calling (910) 962-7444.

POLICY STATEMENT ON ILLEGAL DRUGS

In accordance with policy adopted by the Board of Governors of the University of North Carolina and the Board of Trustees of UNCW, disciplinary proceedings against a student, faculty member, administrator, or other employee will be initiated when the alleged conduct is deemed to affect the interest of UNCW. The penalties that may be imposed range from written warnings with probationary status to expulsion from enrollment and discharge from employment.

The full text of the policy appear in the *UNCW Policies and Procedures Manual* (http://www.uncw.edu/sp/admproc/Msc120.htm), the *Faculty Handbook*, VIII.C.3 (http://www.uncw.edu/fac_handbook/), and in both the electronic and print forms of the *Code of Student Life* (http://www.uncw.edu/stuaff/doso/code/.

RELEASE OF "DIRECTORY INFORMATION"

The University of North Carolina at Wilmington routinely has made public certain information about its students. Typically, UNCW releases the names of students who are selected by the various honorary societies, receive scholarships, make the Dean's List, hold offices, or are members of athletic teams. The annual commencement program publishes the names of persons who have received degrees from UNCW during the year.

The Family Educational Rights and Privacy Act defines the term "directory information" to include the following information: the student's name, address, telephone listing, date and place of birth, major field of study, participation in officially recognized activities and sports, weight and height of members of athletic teams, dates of attendance, degrees and awards received, and the most recent previous educational agency or institution attended by the student. The university will make public information about each student limited to these categories in ways such as those described above. Of course, information from all these categories is not made public in every listing.

Students who do not wish to have any or all of such "directory information" made public without their prior consent must notify the Office of the Registrar of this fact in a signed and dated statement specifying items not to be published. This notice must be received by the Office of the Registrar by the end of the registration period for the semester or session of first enrollment or, after an absence, of re–enrollment and by the end of each fall registration thereafter.

Family Educational Rights and Privacy Act (FERPA)

Certain personally identifiable information about students ("education records") may be maintained at The University of North Carolina General Administration, which serves the Board of Governors of the University system. This student information may be the same as, or derivative of, information maintained by a constituent institution of the University; or it may be additional information. Whatever their origins, education records maintained at General Administration are subject to the federal Family Educational Rights and Privacy Act of 1974 (FERPA).

FERPA provides that a student may inspect his or her education records. If the student finds the records to be inaccurate, misleading, or otherwise in violation of the student's privacy rights, the student may request amendment to the record. FERPA also provides that a student's personally identifiable information may not be released to someone else unless (1) the student had given a proper consent for disclosure or (2) provisions of FERPA or federal regulations issued pursuant to FERPA permit the information to be released without the student's consent.

A student may file with the U.S. Department of Education a complaint concerning failure of General Administration or an institution to comply with FERPA.

The policies of the University of North Carolina General Administration concerning FERPA may be inspected in the office at each constituent institution designated to maintain the FERPA policies of the institution. Policies of General Administration may also be accessed in the Office of the Secretary of The University of North Carolina, General Administration, 910 Raleigh Road, Chapel Hill, NC.

Further details about FERPA and FERPA procedures at General Administration are to be found in the referenced policies. Questions about the policies may be directed to Legal Section, Office of the President, The University of North Carolina, General Administration, Annex Building, 910 Raleigh Road, Chapel Hill, NC (mailing address P.O. Box 2688, Chapel Hill, NC 27515-2688; tel: 919-962-4588).

STUDENT CONDUCT

The filing of an application of admission shall be construed as both an evidence and pledge that the applicant accepts the standards and regulations of the University of North Carolina at Wilmington and agrees to abide by them. Each student, by the act of registering, is obligated to obey all rules and regulations of the university as stated in the Code of Student Life, the university catalogue and other university publications. The university reserves the right to ask for the withdrawal of any student who refuses to adhere to the standards of the institution.

STUDENT DEVELOPMENT SERVICES

The University of North Carolina at Wilmington Student Development Services integrates the activities of the Counseling Center, CROSSROADS (Substance Abuse Prevention and Education), Disability Services, National Testing Program, Pharmacy, Student Health Center, University Learning, Tutoring and Learning Center, Health Promotion and Nutrition Services, and the Writing Place. The interaction of these providers and educators addresses the developmental health and wellness concerns of the university community and its students.

Students seeking Student Development Services are afforded appropriate privacy and confidentiality as well as ease in referral to resource professionals. Student Development Services understands the importance of a continuum of care in attending to individual students and their needs. Contact UNCW Student Development Services or an individual service unit for questions concerning referral information.

STUDENT GOVERNMENT ASSOCIATION

The Student Government Association is a democratic organization, permitting expression of student opinion, working for the best interest of the university and upholding a high standard of morals and conduct. Student activity fee money supports the Student Government Association in its objectives and activities. Officers, class senators and at–large representatives are elected by the student body.

Services such as Saferide, legal services, discounted movie tickets, campus entertainment, and student organization funding are primary components of the comprehensive SGA program. The Student Government Association is a member of the North Carolina Association of Student Governments.

STUDENT HEALTH CENTER

The Student Health Center complements the academic mission of the university by providing high quality, accessible, cost-effective health services that address students' health needs. Services include confidential diagnosis and treatment of general and acute medical problems, allergy injections, immunizations, laboratory services, women's health care, contraception services, men's health assessment and preventive services. There is a nominal charge for some of these services over and above the health fee.

The health fee is included in student fees and entitles students taking six or more credit hours to health services. Students taking less than six hours will be entitled to health services upon payment of the health fee.

The Student Health Center does not issue excuses for class absences due to illness.

Student Health Insurance

A university sponsored Student Group Health Insurance Plan is available at a reasonable rate. Contact the Student Health Center or visit the SHC web site for more information.

Pharmacy

The UNCW Pharmacy is located in Westside Hall. Students may fill prescriptions from any provider and may purchase a variety of over-the-counter medications. Crutches are also available for rental.

STUDENT MEDIA

Founded in 1948, *The Seahawk*, the student newspaper, publishes a weekly print edition and an online edition (www.theseahawk.org) throughout the academic year, plus an orientation issue in early June. The paper is supported by advertising sales and its staff is composed entirely of students interested in journalism, sales, and marketing, photo-journalism, and computer-assisted design. *Atlantis* is the student magazine of literature and art, published entirely by students each spring. *Atlantis* also sponsors public readings and an annual art exhibit. Student Body Television (SBTV), founded in 1999, produces the campus news magazine "Seahawk Central," airing weekly on UNCW-TV cable channel 5, plus other projects in digital video format. Blank Slate Productions, a production unit for student films, is an SGA-funded affiliate of student media.

The UNCW Student Media Board consists of students, staff and faculty who advise and supervise student media, elect student media managers, and allocate funding. Applications for two annually appointed student at-large positions are accepted from interested students early in the fall semester.

STUDENT ORGANIZATIONS

There are over 130 student organizations registered with the Campus Activities and Involvement Center. These organizations include: political, professional, academic, ethnic and religious organizations, Greek letter organizations, sport clubs, service clubs, honoraries, special interest groups, and student media. All of these organizations help to develop the UNCW community through the activities and affiliations that they create. Many of the clubs are showcased during the fall Involvement Carnival held in late August. You can find out information about these organizations in the Campus Activities and Involvement Center in UU205 or on the websites developed for this purpose: http://appserv01.uncw.edu/caic/studentorgs/index.asp.

UNCW VOLUNTEERS

The UNCW Volunteers are a partnership among students, faculty, staff, and surrounding communities who are committed to making the world a better place by combining time, talent, and resources. By identifying and coordinating one-time, on-going and immersion volunteer experiences, we strive to cultivate a sense of social responsibility, social justice, life-long learning, and leadership among those who serve and are served. We support both service and service-learning efforts.

The UNCW Volunteers believe in the words of Martin Luther King, Jr., who stated that "everyone can be great, because everyone can serve." Whether you have had extensive experience with volunteering, or if you just have the desire to give something back to your community, we have programs to serve and challenge you. In 2001-2002, the UNCW Volunteers performed 31,000 service hours. We work with over 100 area non-profit agencies, and 20 different faculty on campus.

UNIVERSITY INFORMATION CENTER

The Information Center, located on the first floor of the University Union, provides a variety of information on campus, student and community activities, as well as campus telephone numbers. The center also provides saferide vouchers, discount movie ticket sales, athletic and event ticket sales, campus lost and found, magazine and newspaper check-out, umbrella check-out, locker rentals, vending machine refunds, and FAX service.

UNIVERSITY LEARNING SERVICES

The University Learning Services, comprised of The Math Lab, Tutoring and Learning Center and Writing Place, is committed to providing an environment that: challenges and supports students in reaching their academic goals, integrates learning support resources and services, and course content, supports the learning objectives of faculty across the curriculum, and advances the educational and retention efforts of UNCW.

Tutoring and Learning Center

The Tutoring and Learning Center, located on the second floor of Randall Library, offers assistance to all UNCW students in developing the skills necessary to become successful, independent learners. Services include tutorial assistance, Supplemental Instruction (SI), study skills workshops and individual consultations.

Free tutoring is offered in all basic studies courses as well as some selected upper level courses. Students meet weekly with trained peer tutors to increase comprehension in the course content and study and test-taking skills. In addition to traditional tutoring services, the Tutoring & Learning Center also coordinates Supplemental Instruction (SI). SI is a series of peer assisted study sessions offered several times each week to help students in traditionally difficult courses such as biology, chemistry and physics. All students enrolled in courses, which offer SI, are encouraged to attend. Sessions are voluntary and promote better understanding of course content as well as improved study skills.

Students needing help with general study skills are encouraged to attend the Academic Skills Workshops. Workshop topics include time management, learning styles, textbook reading strategies, note-taking methods, and test-taking skills. The Tutoring and Learning Center also provides outreach services by tailoring presentations for campus organizations and selected courses. In addition, any UNCW student may schedule an appointment to meet one-on-one with a study skills consultant to discuss his or her individual academic goals and develop strategies to achieve them.

The Math Lab

The purpose of the UNCW Math Lab is to help students make the transition from high school-level mathematics courses to college-level mathematics courses. Students can receive help with note-taking skills, how to approach a math assignment, and study strategies for math exam preparation. Free tutoring is available for all 100-level mathematics and basic statistics courses; students can use either drop-in hours or schedule an appointment for more individualized assistance. Help is also available with mathematics questions from other areas such as chemistry, physics, or economics; assistance with test preparation for standardized tests such as the Praxis I, GRE, and MCAT is also available. Several computers are available in The Math Lab with course specific software for students who want to work on math and statistics assignments. The Math Lab also coordinates UNCW mathematics placement testing for new students; additional diag-

nostics testing in mathematics is also provided. Hours and services can vary by semester. Contact information: (910) 962-7215 web site: http://www.uncw.edu/mathlab.

Writing Place

The primary concern of the Writing Place at UNCW is with students and their writing. Based on peer interaction, the Writing Place helps student writers one-to-one, from freshmen through graduate students, improve their academic writing. Contact information: 910.962.7155 Web site: www.uncw.edu/stuaff/writingplace.

UNIVERSITY POST OFFICE

UNCW Postal Services operates a U.S. Post Office contract station located in the Warwick Center. A variety of mailing services are provided, including postage, money orders, mailing envelopes, and Express Mail service. In addition to postal services, a FAX service is available for sending and receiving FAX transmissions. All services are available Monday through Friday from 8:30 a.m. to 4:30 p.m. at the post office window.

Student Mail

Every student enrolled at UNCW is issued a post office box for their personal and university correspondence. All university correspondence, with the exception of tuition bills and grades, is mailed to this box. Students are asked to check their boxes regularly as mail is distributed Monday through Friday by 1:00. Post office box keys and combinations are available at the post office window at no charge. Students are required to have a UNCW I.D. to pick up box assignments. Students who need assistance opening mail boxes should contact the post office window staff. At the end of the spring and summer sessions a $10 key replacement fee will be charged for lost or unreturned keys. Mail forwarding is available during summer months and at the end of your stay at UNCW when a mail forwarding request is completed.

UNIVERSITY UNION/WARWICK CENTER

Student life is enriched at the University of North Carolina at Wilmington by a broad spectrum of activities, most of which occur in or around the University Union and Warwick Center. The Union is a 53,000 square–foot facility that houses students organization offices, conference rooms, lounges, study areas, the Hawk's Nest and Union Station coffee bar, rental lockers, the University Information Center, art exhibit space, and an assortment of student services such as the commuter and non-traditional student center.

Across the street from the Union is the 43,000 square foot Warwick Center, with the U.S. Post Office, automatic teller machines, recreation and games facilities, lounges, Center Stage, ballroom, and space for large or small events.

The University Union, Warwick Center and the Campus Commons are student-oriented facilities in the center of campus that are adaptable, well-maintained, well-equipped, safe and accessible. These facilities are intentionally designed to be inviting and to encourage interaction within the community.

The *UNSea* CARD

The *UNSea* Card is your UNCW student ID and your official form of identification on campus. It allows you the use of campus facilities, and provides you with Safe easy access to university services. The *UNSea* Account is the debit account feature of your *UNSea* Card. With your prepaid funds, you can make purchases at all food service locations, bookstore, vending machines, student copiers, the copy center, health center and pharmacy, laundry machines and UNCW postal services. There is no minimum deposit or fee for the use of this account. Deposits can be made at the Auxiliary Services office, Randall Library and the Seahawk Station in Apt. M. For more information, visit the Auxiliary Services office in the Warwick Center.

EXPENSES

The Board of Governors of the University reserves the right to change the charges for tuition, fees and the room and board rate at any time without prior notice.

TUITION AND FEES (In effect at time of publication)

All charges for tuition and regular fees are due and payable on or before the day of registration. Checks and money orders should be made payable to the University of North Carolina at Wilmington.

Graduate students tuition and fees per semester (nine or more semester hours is considered full-time): See chart below for tuition and fees for MBA students.

semester hours	In-state students	Out-of-state students*
1-2	351.12	1,563.87
3-5	638.50	3,064.00
6-8	1,183.87	4,822.12
9 or more	1,719.00	6,570.00

MBA graduate students will be charged as show below.

semester hours	In-state students	Out-of-state students*
1-2	414.00	1,626.25
3-5	764.25	3,188.75
6-8	1,372.50	5,009.25
9 or more	1,970.50	6,819.50

The following student activities fees are included in the full-time tuition and the fee amount per semester.

	In-state	Out-of-State
Student Services	$10.00	$10.00
Technology	183.00	183.00
Student Support	11.00	11.00
Athletic Fee	167.50	167.50
Health Services	65.00	65.00
SGA	22.50	22.50
Media	4.00	4.00
Student Union Facilities	52.00	52.00
Recreation and Intramurals	57.50	57.50
Postal	6.00	6.00
Athletic Facilities	47.50	47.50
Cultural Events	8.50	8.50
Student Union Debt	38.50	38.50
Physical Education Debt	10.00	10.00
Union Expansion Debt	57.50	57.50
Westside Expansion Debt	10.00	10.00
Recreation Debt	50.00	50.00
Transportation	15.00	15.00
Leadership	10.50	10.50
Assoc. of Student Government	.50	.50
ID/Debit Card	3.00	3.00
Subtotal	829.50	829.50

*See information on residency at the end of this section.

Other fees:

Late registration charge or late payment of tuition/fees $75.00
Application Fee (to accompany application, nonrefundable) $45.00
UNSea Card – Student ID $15.00
Parking Fee (per year) $172.00

No degree, diploma, transcript of credit, or grades will be furnished a student until all financial obligations to the university, other than student loans, have been paid. All previously incurred expenses and accounts at the university must be paid in full prior to preregistration or registration for a new term.

CHARGE FOR LATE REGISTRATION OR LATE PAYMENT OF TUITION AND FEES

A late charge will be assessed on students that fail to register or pay tuition and fees by the published deadline. Students who have not paid tuition and fees by the deadline will be cancelled and must re-register with a $75 late charge. Appeals may be made to the Late Payment Charge Appeals Committee, c/o Student Accounts. Appeals must be submitted in writing no later than the last day of the semester in which thee charge is incurred.

ON-CAMPUS LIVING

The university has residence hall facilities for approximately 2,360 students in eight modern, conveniently located residence halls, 13 apartment buildings, and seven suite style buildings.

All rooms are air conditioned and furnished, and laundry facilities are available. Residence hall, apartment and suite students are required to participate in the university dining hall program under one of the three meal plans. The university operates a modern, air conditioned cafeteria building. Short order food service is available in the Hawk's Nest located in the University Union, in the Center Stage Cafe located in the University Center, specializing in pizza and subs, and the convenience store located in apartment building M. Service is on a cash basis for non-boarding students. During the winter break, all residential facilities are closed with the exception of the UNCW Apartments and International House. During spring break, all residential facilities are closed with the exception of the UNCW Apartments, the University Suites, International House, and the University Suites.

MEAL PLAN OPTIONS

A meal plan is required for all students who plan to live in campus housing. There are separate optional meal plan offerings for students living off campus. The *UNSea Card* is the student's UNCW identification card, which also serves as a meal card, and must be presented at every meal. Students' ID cards are not transferable. Meal plans and meal plan rates are set by the university's Board of Trustees and are subject to change. The most recent approved rates are available through the Auxiliary Services office at (910) 962-3560.

2004-2005 MEAL PLANS

Teal Plan

14 Meal Plan: 14 Meals Plus $120 Food Dollars ($1,178 per semester)

Perfect for those with unpredictable schedules and eating habits. This plan offers any 14 meals during the seven day week at Wagoner Dining Hall, or during "Dine till Nine; at the Hawk's Nest, and $120 food dollars (for the semester) that can be used in all campus dining locations. Cash may be added to the *UNSea Card* at the students' discretion.

Blue Plan

19 Meal Plan: 19 Meals Plus $70 Food Dollars ($1,178 per semester)

A great plan for those with big appetites that like to eat regular and nutritious meals. This plan offers 19 meals a week at Wagoner Dining Hall or during "Dine till Nine" at the Hawk's Nest, and $70 food dollars (for the semester) that can be used in all campus dining locations. When class

schedule does not allow time to go to Wagoner Hall, meals may be purchased with food dollars. The 19-meal plan also comes with 10 free guest meals to treat visiting friends or family to Wagoner Hall. Cash may be added to the *UNSea Card* at the student's discretion.

Gold Plan

Gold 130 Plan: 130 Meals Plus $200 Food Dollars ($1,178 per semester)

130 meals to be used any time during the semester without the "meals per week" restriction, and $200 food dollars (for the semester) that can be used at all campus dining locations. Meals can be used at random during the semester, and can be used to treat visiting friends or family to a meal in Wagoner Hall or during "Dine 'till Nine" at the Hawk's Nest. Cash may be added to the *UNSea Card* at the student's discretion.

Gold 95 Plan: 95 Meals Per Semester and $500 Food Dollars ($1,178 per semester)

This plan is limited to residents in the suites and apartments.

PLEASE NOTE THAT MEAL PLAN PRICES ARE SUBJECT TO CHANGE.

ROOM AND BOARD RATES

Room and board rates are set annually by the university's Board of Trustees during their spring meeting. The most recent set of approved rates are available by contacting the Office of Housing and Residence Life.

Annual contracts are for the full academic year consisting of both the fall and spring semesters. Room rates include utilities, local telephone service, high speec Ethernet service, basic cable television service, security and housekeeping (with the exception of the apartments).

The university reserves the right to change campus housing rates at anytime without prior notice. A non-refundable $100 application fee must be remitted with each completed application. Timely submission of the housing application and $100 application fee is highly recommended. Assignments will be made on a first come, first served basis. Once all beds are assigned, Housing and Residence Life will start a waiting list. The waiting list will remain in effect through the opening of the residential facilities on August 14, 2004.

2004-2005 SEMESTER ROOM AND BOARD RATES

Double Room (Belk, Galloway, Graham, Hewlett and Schwartz)		
	with Gold 130	$2,900
	with 14-meal plan (Teal) or 19-meal plan (Blue)	$2,900
Apartment	with Gold 130 or Gold 95	$3,262
	with 14-meal plan (Teal) or 19-meal plan (Blue)	$3,262
Double Room (Suites, International House, and Honors House, and Cornerstone Hall)		
	with Gold 130	$3,126
	with 14-meal plan (Teal) or 19-meal plan (Blue)	$3,126
Single Suite	with Gold 130 or Gold 95	$3,262
	with 14-meal plan (Teal) or 19-meal plan (Blue)	$3,262

If you are interested in obtaining information regarding campus housing, please contact:

The Housing and Residence Life Office
University of North Carolina at Wilmington
601 South College Road
Wilmington, North Carolina 28403-5959
Telephone 910-962-3241 Fax: 910-962-7032
E-mail: housing@uncw.edu

UNCW REFUND POLICY

The university's refund policy complies with the requirements of the university's accrediting agency and the U.S. Department of Education.

Students must follow the official withdrawal process to receive a refund under the university's policy. To officially withdraw from the university, graduate students must complete an Official Withdrawal Form in the Graduate School. Any outstanding financial obligations to the university will be deducted from the amount refunded.

REFUNDS - TUITION AND FEES, ROOM AND BOARD

A student who officially withdraws from the university on or before the last day of registration (drop/add) period will receive a refund of the amount paid. Refunds are based on the date contained on the Official Withdrawal Form.

Students withdrawing after the drop/add period will receive refunds as follows:

Date of Withdrawal	Refund Percentage
After drop/add but prior to first 10% of the enrollment period	90%
Between the first 10% and the end of the first 25% of the enrollment period	50%
Between the first 25% and the end of the first 50% of the enrollment period	25%

No refunds will be made for withdrawals after the end of the first 50% of the enrollment period.

Declining balance portions of board plans will be refunded separately. The refund policy applies to complete withdrawals from UNCW. Students who simply reduce their course load after the drop/add period receive NO refund or reduction of fees whatsoever.

SUMMER SCHOOL

Summer session tuition, fees, refund policy and room and board rates will be announced in the Summer Sessions Bulletin.

RESIDENCE STATUS FOR TUITION PURPOSES

The basis for determining the appropriate tuition charge rests upon whether a student is a resident or a nonresident for tuition purposes. Each student must make a statement as to the length of his or her residence in North Carolina, with assessment by the institution of that statement to be conditioned by the following:

Residence. To qualify as a resident for tuition purposes, a person must become a legal resident and remain a legal resident for at least twelve–months immediately prior to classification. Thus, there is a distinction between legal residence and residence for tuition purposes. Furthermore, twelve-months legal residence means more than simple abode in North Carolina. In particular, it means "maintaining a domicile (permanent home of indefinite duration) as opposed to "maintaining a mere temporary residence or abode incident to enrollment in an institution of higher education." The burden of establishing facts which justify classification of a student as a resident entitled to in–state tuition rates is on the applicant for such classification, who must show his or her entitlement by the preponderance (the greater part) of the residentiary information.

Initiative. Being classified a resident for tuition purposes is contingent on the student's seeking such status and providing all information that the institution may require in making the determination.

Parent's Domicile. If an individual, irrespective of age, has living parent(s) or court–appointed guardian of the person, the domicile of such parent(s) or guardian is, prima facie, the domicile of the individual; but this prima facie evidence of the individual's domicile may or may not be sustained by other information. Further, nondomiciliary status of parents is not deemed prima facie evidence of the applicant child's status if the applicant has lived (though not necessarily legally resided) in North Carolina for the five years preceding enrollment or re–registration.

Effect of Marriage. Marriage alone does not prevent a person from becoming or continuing to be a resident for tuition purposes, nor does marriage in any circumstances insure that a person will become or continue to be a resident for tuition purposes. Marriage and the legal residence of one's spouse are, however, relevant information in determining residentiary intent. Furthermore, if both a husband and his wife are legal residents of North Carolina and if one of them has been a legal resident longer than the other, then the longer duration may be claimed by either spouse in meeting the twelve–month requirement for in–state tuition status.

Military Personnel. A North Carolinian who serves outside the state in the armed forces does not lose North Carolina domicile simply by reason of such service. And students from the military may prove retention or establishment of residence by reference, as is other cases, to residentiary acts accompanied by residentiary intent.

In addition, a separate North Carolina statute affords tuition rate benefits to certain military personnel and their dependents even though not qualifying for the in–state tuition rate by reason of twelve months legal residence in North Carolina. Members of the armed services, while stationed in and concurrently living in North Carolina, may be charged a tuition rate lower than the out–of–state tuition rate to the extent that the total of entitlements for application tuition costs available from the federal government, plus certain amounts based under a statutory formula upon the in–state tuition rate, is a sum less than the out–of–state tuition rate for the pertinent enrollment. A dependent relative of a service member stationed in North Carolina is eligible to be charged the in–state tuition rate while the dependent relative is living in North Carolina with the service member and if the dependent relative has met any requirement of the Selective Service System applicable to the dependent relative. These tuition benefits may be enjoyed only if the applicable requirements for admission have been met; these benefits alone do not provide the basis for receiving those derivative benefits under the provisions of the residence classification statute reviewed elsewhere in this summary.

Grace Period. If a person (1) has been a bona fide legal resident of the required duration, (2) has consequently been classified a resident for tuition purposes, and (3) has subsequently lost North Carolina legal residence while enrolled at a public institution of higher education, that person may continue to enjoy the in–state tuition rate for a grace period of twelve–months measured from the date on which North Carolina legal residence was lost. If the twelve–months end during an academic term for which the person is enrolled at a state institution of higher education, the grace period extends, in addition, to the end of that term. The fact of marriage to one who continues domicile outside North Carolina does not by itself cause loss of legal residence marking the beginning of the grace period.

Minors. Minors (persons under 18 years of age) usually have the domicile of their parents, but certain special cases are recognized by the residence classification statue in determining residence for tuition purposes.

(a) If a minor's parents live apart, the minor's domicile is deemed to be North Carolina for the time period(s) that either parent, as a North Carolina legal resident, may claim and does claim the minor as a tax dependent, even if other law or judicial act assigns the minor's domicile outside North Carolina. A minor thus deemed to be a legal resident will not, upon achieving majority before enrolling at an institution of higher education, lose North Carolina legal residence if that person (1) upon becoming an adult "acts, to the extent that the person's degree of actual emancipation permits, in a manner consistent with bona fide legal residence in North Carolina" and (2) "begins enrollment at an institution of higher education not later than the fall academic term following completion of education prerequisite to admission at such institution."

(b) If a minor has lived for five or more consecutive years with relatives (other than parents) who are domiciled in North Carolina and if the relatives have functioned during this time as if they were personal guardians, the minor will be deemed a resident for tuition purposes for an enrolled term commencing immediately after at least five years in which these circumstances have existed. If under this consideration a minor is deemed to be a resident for tuition purposes immediately prior to his or her eighteenth birthday, that person on achieving majority will be deemed a legal resident of North Carolina of at least

12–months duration. This provision acts to confer in–state tuition status even in the face of other provisions of law to the contrary; however, a person deemed a resident of 12–months duration pursuant to this provision continues to be a legal resident of the State only so long as he or she does not abandon North Carolina domicile.

Lost but Regained Domicile. If a student ceases enrollment at or graduates from an institution of higher education while classified a resident for tuition purposes and then both abandons and reacquires North Carolina domicile within a 12–month period, that person, if he or she continues to maintain the required domicile into re–enrollment at an institution of higher education, may re–enroll at the in–state tuition rate without having to meet the usual twelve–month durational requirement. However, any one person may receive the benefit of this provision only once.

Change of Status. A student admitted to initial enrollment in an institution (or permitted to re–enroll following an absence from the institutional program which involved a formal withdrawal from enrollment) must be classified by the admitting institution either as a resident or as a non-resident for tuition purposes prior to actual enrollment. A residence status classification once assigned (and finalized pursuant to any appeal properly taken) may be changed thereafter (with corresponding change in billing rates) only at intervals corresponding with the established primary division of the academic year.

Transfer Students. When a student transfers from one North Carolina public institution of higher education to another, he or she is treated as a new student by the institution to which he or she is transferring and must be assigned an initial residence status classification for tuition purposes.

Appeal. The initial classification of graduate students as in–state or out–of–state residents for tuition purposes is made by the Graduate School. Appeals for in–state status may be made to the campus appeals body, Out–of-State Tuition Appeals Committee. University regulations governing residential classification of students are set forth in detail in A Manual to Assist the Public Higher Education Institutions of North Carolina in the Matter of Student Residence Classification for Tuition Purposes. Each enrolled student is responsible for knowing the contents of this manual. Copies of the manual are available for inspection upon request in the undergraduate Admissions Office and in Randall Library.

FINANCIAL AID FOR GRADUATE STUDENTS

The primary mission of the Financial Aid & Veterans Services Office (FAVSO) is to assist prospective and currently enrolled students and their families in securing the most suitable financial aid as the student pursues a degree or certificate at UNCW. Through our outreach efforts, we support the university's mission, including the commitment to public service and the encouragement of access to college. To this end, we administer federal, state and institutional student financial aid programs in excess of $46M to assist UNCW students.

Eligibility for the majority of our programs is determined using the U.S. Department of Education's Federal Methodology. Most gift aid is need based. However, a significant amount of non-need based funding is also available, primarily in the form of loans.

UNCW offers assistance in the form of scholarships, grants, loans, Federal Work-Study jobs or a combination of these programs. For most graduate students, federal student loans are the primary source of financial assistance. Students are encouraged to apply as soon after January 1st as possible to receive priority consideration for aid. Aid funds are disbursed to the students' account at the beginning of each semester on the first day of class to those students whose financial files are completed. Aid will continue to be disbursed through the rest of the semester as student's financial aid files become complete. Refunds will be issued to students whose bills are paid in full.

To apply for financial aid, a student must complete a Free Application for Federal Student Aid (FAFSA). Some students must submit other documentation as requested by the Financial Aid & Veterans Services Office. To receive federally-funded financial aid, students must be making satisfactory academic progress as determined by the Financial Aid and Veterans Services Office; be a U.S. citizen or eligible non-citizen; and meet other criteria as specified by the U.S. Department of Education. Questions concerning financial aid at UNCW should be directed to the Financial Aid & Veterans Services Office (FAVSO). The office is located on the first floor of James Hall.

Office Telephone (910)962-3177 Fax (910)962-3851
E-mail: finaid@uncw.edu
World Wide Web site at http://www.uncw.edu/finaid
Veterans Services E-mail: veterans@uncw.edu

GRADUATE ENROLLMENT STATUS FOR FINANCIAL AID PURPOSES

For financial aid purposes, the following definitions apply for determining graduate enrollment status during the academic year (fall and spring semesters):

Enrollment Status	Graduate Level Credit Hours*
Full time	9 or more
3/4 time	6.0-8.5
1/2 time	4.5-5.5
Less than 1/2 time	0-4.0

*Number of credit hours in which the student is enrolled at the end of the drop/add period.

Note: a student may also be considered full-time when enrolled for less than nine hours if the student holds a teaching or research assistantship, is enrolled for one to three hours of thesis work, enrolled in GRC 600, or PSY 598, Internship.

Graduate students must be enrolled at least half-time to qualify for most financial aid programs.

Credit hours for summer sessions I and II are added together and then defined as one academic semester for financial aid purposes. For details contact the Financial Aid & Veterans Services Office (FAVSO).

ASSISTANTSHIPS

Graduate teaching assistantships are available on a limited basis in the Cameron School of Business; Watson School of Education; School of Nursing, and the College of Arts and Sciences in the departments of Biological Sciences, Chemistry, Creative Writing, Earth Sciences, English,

History, Mathematics and Statistics, Political Science and Psychology. A limited number of graduate research assistantships are available through the Center for Marine Science. The admission application process determines the candidates for these awards. For information contact the specific department/school or the Graduate School.

Diversity Scholarships

Diversity Scholarship Students must be admitted to UNCW as full-time students through the ability of the student to successfully complete a degree program at UNC Wilmington, as indicated by a variety of predictors, including, but not limited to, standardized test scores, high school grade point average in academic courses completed, letters of reference, the student's record of achievement in extracurricular and non-academic areas, and an essay by the student composted for admission purposes.

Students admitted to UNCW do not need to file a separate application for this scholarship.

GENERAL FELLOWSHIPS AND AWARDS

The Dr. Ralph W. Brauer Fellowship was created through the estate of Dr. Brauer, a long tenured professor at UNCW. It is intended to provide financial support to one or more graduate students to assist with either tuition and fees, books, publications or research travel as determined by the dean of the graduate school. A committee appointed by the dean will recommend recipients and the amount to be awarded. Contact the dean of the graduate school for more information.

The Champion McDowell Davis Fellowship is available to students from any major. This scholarship covers tuition and fees, books and other selected expenses and is awarded to students based on academic achievement, leadership potential and demonstrated financial need. A selection committee is charged with selecting the recipients each year.

The Graduate School's Awards for New Scholars. A limited number of scholarships are available to students entering any of UNCW's graduate programs for the first time. Students do not apply for these scholarships. Instead, nominations originate with the departments, which submit their recommendations to the dean of the Graduate School. Criteria include evidence of exceptional scholarship, normally strong GRE scores (or their equivalent) and an excellent undergraduate GPA.

The Jane Logan Lackey Fellowship will be allocated to promote diversity within the Graduate School. An undergraduate GPA of at least 3.25 in the applicant's major will be required.

The Lacy C. and Doris L. Sidbury Fellowship is considered both a merit and need based fellowship subject to the criteria used by both the UNCW Graduate School and Financial Aid Office.

The Lewis/Wiley Alumni Fellowship is considered a merit based fellowship subject to the criteria and guidelines adopted by the Alumni Association of UNCW. Recipients shall be limited to graduate students.

The Perry Daniel Lockamy, Jr., Graduate Alumni Fellowship provides one $1,500 annual award for in-state tuition and fees award based on academic achievement, leadership abilities, and potential. Two recommendations are required. Applicants may be classified as in-state or out-of-state. Applications may be requested from the UNCW Alumni Relations Office, completed, and returned by the designated deadline.

The Sylvia and B. D. Schwartz Graduate Fellowship Award may be awarded to any graduate student enrolled in nine hours or more at the University of North Carolina at Wilmington. Recipients shall be determined by the Graduate School and will receive an amount equal to in–state tuition and fees.

Cameron School of Business Scholarship

Dixon, Odom and Company Fellowship is awarded to an MSA student. Contact the Office of the Dean of the Cameron School of Business for application instructions.

The J. W. Jackson Fellowship has a $2,000 per year value and is restricted to a junior, senior or graduate student enrolled in the Cameron School of Business Administration. The scholarship

is designed for students with high academic potential. Applications can be made in the Cameron School of Business. Students awarded this scholarship are eligible to reapply.

RMS McGladrey and Pullen Fellowship is made to a student entering the Master of Science in Accountancy students. Contact the Office of the Dean of the Cameron School of Business for application instructions.

Kirk and Sylvia Sears Entrepreneurial Enhancement Fellowship is a $2,500 annual scholarship created to assist students in the Master of Business Administration program within the Cameron School of Business.

Elwood Walker Fellowship is awarded annually to an MSA student in the Cameron School of Business. The recipient must be academically gifted, have a strong character and be supported by recommendations of the faculty of the Cameron School of Business. Contact the Graduate Program Office in the Cameron School of Business for applications.

College of Arts and Sciences Scholarships

The Will S. Deloach Chemistry Fellowship. Contact the chair of the department of chemistry for more information.

The F. P. Fensel, Jr., Memorial Fellowship is intended for a graduate student in Marine Biology as selected by the faculty of the department based on merit. If there are no students that meet the requirements the scholarship may be awarded to an undergraduate student in marine biology. The scholarship will cover tuition and fees for one academic year. A student may reapply for a second year during the designated time as established by the department chair.

Got-Em-On Live Bait Club Graduate Fellowship is intended to provide financial support for a student who has been accepted into the graduate program and whose interest and research focus on the issues affecting the fish population in the waters of Southeastern North Carolina.

The Philip Gerard Graduate Fellowship is intended to provide tuition, fees and other expenses to graduate students of English who are working toward a M.F.A. in creative writing. The scholarship is merit-based as a first priority, with exemplary moral character and leadership potential serving as secondary consideration,

The Charles F. Green, Jr. Fellowship The recipient must be a graduate student of history working toward a Master's degree. The amount of $2,000 will be awarded annually to provide for in-state tuition, fees and books and any excess funds applied toward room and board. The award shall be evenly divided between fall and spring semesters. Recipients may reapply if their academic performance is competitive with that of other candidates for the scholarship.

The Austin Robert Hartsook Fellowship was created by Robert F. Hartsook, in honor of his son, Austin. The recipient must have been accepted into the MFA in Creative Writing program. The award is considered a merit fellowship and the recipient will be selected on demonstrated creative talent and artistic promise. Contact the Department of Creative Writing.

The Alton Yates Lennon Graduate Fellowship is awarded to a graduate student of English working toward a M.A. degree. The award shall provide for in-state tuition, fees, and books. The award shall be evenly divided between fall and spring semesters.

The MPA Community Advisory Board Fellowship will be awarded out of the MPA Student Support Fund, established by the MPA Community Advisory Board. The scholarship will be used to assist graduate students majoring in public administration in the Department of Political Science in the College of Arts and Sciences. Annually, the Department of Political Science will select an MPA Graduate of the Year based on demonstrated academic performance, leadership qualities and by demonstrated potential as a public administration professional. Contact the chair of the political science department for more information.

Lewis E. Nance Chemistry Fellowship is a merit based financial aid program to assist a new or currently enrolled chemistry graduate student. The amount of the award is determined by the endowment earnings and will assist with tuition, fees, supplies and books.

The M. Tyrone Rowell Fellowship is merit based. The recipient must be a graduate student of history working toward a master's degree, and will be chosen by the chair of the History Department. The amount of $2,000 will be evenly divided between fall and spring semesters for in-state tuition, fees and books, with any excess funds applied toward room and board.

Recipients may reapply if their academic standing performance is competitive with that of other candidates for the scholarship.

The Susan Goodman Stern Graduate Fellowship will be awarded to a new student accepted into the history graduate program or a returning student to the program. The criteria includes having a genuine interest in the study of ideas and people, sensitivity to the environment and concern of others within the community. The fellowship is awarded by the Department of History.

The Wright Corporation Fellowship is used to provide fellowships in the Department of Chemistry. The chair of the department may determine the process for making an award to one or more graduate students in the department. Contact the chair of the chemistry department for more information.

Watson School of Education Scholarships & Awards

Grace M. Burton Promise of Excellence Graduate Fellowship is offered to first year elementary, language and literacy, middle school or special education full-time graduate students. One fellowship award will be made annually based on scores attained on the Miller Analogies Test or GRE. The award will provide in-state tuition for one year.

Ann Royer Corley Scholarship is offered to graduate or undergraduate students who have been formally accepted into one of the programs in the Watson School of Education. The scholarship recipient will be selected based on demonstrated academic ability. The award will provide half the amount in the fall and half in the spring semesters.

Donald R. Watson Merit Award is offered to graduate students who are enrolled in the master's program. A GPA of 3.0 and a commitment to the field of education is required. Selection is based on the student's prior academic performance, uniqueness and quality of application, plans for future application of study abroad experience and letters of support. This scholarship may also be awarded to an undergraduate student. No application is necessary.

Scholarships Awarded by Off-Campus Agencies

The Matthew Shepard Memorial Scholarship is sponsored and awarded by Grow: A Community Service Corporation to gay or lesbian students and includes in-state tuition, fees and a small book stipend. Recipients must be actively involved in working for social/political change with the gay and lesbian community. A selection committee from Grow is charged with selecting the recipients. For applications contact Grow, 341-11 S. College Road, Suite 182, Wilmington, NC 28403.

North Carolina Principals Fellows Program

This is a state funded scholarship/loan program which was established to train qualified individuals to enter administrative level positions in the field of public education. The program provides a full year of academic study at the master's level, followed by one-year internship in a school system. A 12-member Principal Fellows Commission selects the scholarship/loan recipients. Students must be in the school administration master's program, a NC resident, and promise to seek and obtain employment as an assistant principal in a public school or US government school in North Carolina for four years. The loan is canceled through service as a NC principal or assistant principal. Awards of $20,000 per year of full-time study are made. Contact the Director of the Principal Fellows Program at UNCW to apply.

Masters Nurse Scholars Program (M-NSP)

This is a state funded competitive merit-based scholarship/loan program available to students who have chosen to enter the nursing profession. An 11-member Nurse Scholars Commission selects recipients for the award on the basis of superior academics, leadership potential, and desire to practice nursing on a full-time basis in North Carolina. Students must be working on a master's degree in nursing, a US citizen, and a NC resident. Awards of $6,000 per year for full-time study and $3,000 per year for part-time study are available. Awards are renewable and financial need is not a criterion. Recipients enter into a contract with the State of North Carolina to work full time as a master's-prepared nurse or to teach in a nurse education program in North Carolina. Twelve months of qualified service cancels one full year of NSP support.

LOANS

Students must complete a Free Application for Federal Student Aid (FAFSA) to initiate the application process and will be automatically considered for all Federal Loan programs and Federal Work-Study.

Federal Stafford Loan Program provides loans to graduate students who qualify on the basis of financial need and are enrolled at least half-time. Applicants complete the regular financial aid application process in addition to completing a loan application. Each academic year, students may borrow the lesser of: $18,500 or the cost of attendance minus all other resources (including financial aid, tuition remissions). Repayment of these loans begins six months after a student ceases to be enrolled at least half time. The interest on the loan begins at the time of repayment and is calculated annually with a cap of 8.25 percent. There are a variety of repayment plans. A portion of the loan may be cancelled upon completion of employment under certain terms and conditions. Students who complete the FAFSA are automatically considered.

Federal Unsubsidized Stafford Loans expand the Stafford Loan program for students who do not demonstrate need, as determined by federal guidelines. Even though the unsubsidized Stafford Loan carries the same loan limits and interest rate as the subsidized Stafford Loan, interest is charged while the student is enrolled. There are a variety of repayments plans. A portion of the loan may be cancelled upon completion of employment under certain terms and conditions. Students who complete the FAFSA are automatically considered. Students must be enrolled at least half-time to be eligible for these loans.

Federal Perkins Loans are for students with substantial demonstrated need and are low-interest loans to help cover educational expenses. Funds are limited in this program. Need is determined by federal formulas through the regular financial aid process. Contact the Financial Aid and Veterans Services Office for further information.

EMPLOYMENT

Federal Work-Study Program is federally funded and provides part–time jobs both on and off the UNCW campus for students who have financial need as determined by federal formulae. To be awarded Federal Work-Study, a student must meet all eligibility requirements for federal aid and file a FAFSA. Students are automatically considered.

Satisfactory Academic Progress (SAP) for Financial Aid Eligibility (Graduate)

Federal regulations require that students receiving financial aid maintain satisfactory academic progress from both qualitative and quantitative measures: cumulative GPA, hours earned compared to hours attempted and maximum time limit. For graduate students, Financial Aid Satisfactory Academic Progress (SAP) standards are the same as the standards established by the UNCW Graduate School (see Retention Policy under Academic Regulations) for continued enrollment.

Satisfactory Academic Progress and eligibility for financial aid are determined each academic year after the spring semester grades are available.

POLICY ON RETURN OF TITLE IV FUNDS

Federal financial aid funds are awarded with the expectation that students will complete the entire period of enrollment. Students "earn" a percentage of the funds they are disbursed with each day of class attendance. When a student who has received federal financial aid funds (Title IV Funds) leaves school before the end of the semester or period of enrollment, federal law requires UNCW to calculate the percentage and amount of "unearned" financial aid funds that must be returned to the federal government. Once a student has completed more than 60% of the enrollment period, students are considered to have earned all funding received. This calculation may have the effect of requiring the student to repay funds that have already been disbursed to the student. Students are encouraged to meet with their financial aid counselor prior to making the decision to withdraw from school.

Veterans Services

Veterans and dependents are encouraged to utilize their VA Educational Benefits while enrolled in the graduate programs at the university. For eligibility information, contact the Financial Aid and Veterans Services Office, (910) 962-3177, or e-mail the veteran services coordinator at: veterans@uncw.edu

ACADEMIC REGULATIONS AND PROCEDURES

REGISTRATION

No minimum number of hours is required for official registration; however, specified maximum course loads must not be exceeded. Students in graduate programs are permitted to register for no more than 15 hours in any one semester. Course loads for students who have service appointments will be determined on an individual basis. A student enrolled in the summer may not register for, and will not receive credit for, more than six hours a term.

CANCELLATION OF REGISTRATION DUE TO FAILURE TO PAY TUITION AND FEES

Students that fail to pay or make suitable arrangements for payment of tuition and fees will have their registrations cancelled. Non-payment does not constitute official withdrawal from the university. If a student is registered, but decides not to attend UNCW, the student must notify the Graduate School in writing prior ot the final day of the term. Please see the section on Charge for Late Payment of Tuition and Fees in the Expenses section of this catalogue.

CANCELLATION OF COURSE REGISTRATION

A department chairperson, upon recommendation of the instructor, may cancel a student's registration in any course offered in the department if the registered student fails to attend the first class meeting and fails to notify the department office of a desire to remain enrolled within 24 hours of the class time. This cancellation action will only take place when a course is fully enrolled and additional students are waiting to enroll. Students who wish to drop a class should not assume they have done so by not attending the first class, but should follow the normal drop/add procedures printed in the semester schedule.

The appropriate dean's office should notify the relevant department chairperson of late–arrival students who cannot attend the first class meeting because of illness or other reasons approved by a dean of the college, the professional schools or the dean of students.

If cancellation action is taken by a department chairperson, the registration openings resulting from this action will be offered to students seeking enrollment in the courses during the official drop/add period. Students who have been authorized to add a course should follow the normal drop/add procedures printed in the semester schedule.

Student appeals resulting from emergencies or other extenuating circumstances will be considered on a case–by–case basis in the appropriate dean's office.

WEB REGISTRATION

Registration, preregistration and drop/add is done through SEAWEB. Please refer to the current Schedule of Classes for dates and information regarding SEALINE/SEAWEB at http://www.uncw.edu/scheduleinfo.

CONTINUOUS REGISTRATION POLICY

For graduate students in programs that require a thesis:

If you have finished all of your course work including all of the required thesis hours to complete the degree you should follow one of the following actions. In any case you should not register for more than the maximum number of thesis hours that are required to complete your degree.

1) Students who will continue to use university resources in completing their degrees must enroll in and pay tuition and fees for one hour of continuous enrollment (GRC 600, Graduate Continuation). This enrollment will be charged at the rate consistent with one credit hour of extension tuition and fees. These hours will not count toward the degree and will carry a different course number than those thesis courses that are included within the hours designated for the degree. Graduate students who need to register for GRC 600 must do so through the Graduate School.

2) Students who will not use university resources should apply to the Graduate School for a leave of absence. Students choosing this option must file a formal petition for a leave of absence that states that they will not use university resources during the leave period.

For graduate students in programs that do not require a thesis:

If you have finished all of your course work for the degree but have not taken your comprehensive exam you must enroll in GRC 600 to continue in the graduate program or request a leave of absence from the Graduate School.

Leave of absence guidelines:

If a graduate student requests and is granted a leave of absence, reenrollment must occur in the term agreed to in the leave request. If a student fails to continue in the agreed upon term, then he/she must reapply for admission. In all cases, course work must be completed within five years of first enrolling in a graduate degree program.

Graduate students must be enrolled in the term in which they complete their graduate work or are scheduled to receive their degree.

Regardless of the course of action selected, all graduate students must either 1) be enrolled in thesis preparation courses for credit; 2) be enrolled in continuous registration (GRC 600); 3) be enrolled in a course for credit in their program of study in the term in which they receive their degree.

Graduate students not complying with the policy stated above will be notified in writing after the drop/add period has expired and will have 10 working days to comply with the policy or face possible dismissal from graduate study.

Please contact the Graduate School (James Hall, 2nd floor, 962-4117) for clarification or more information.

PREREGISTRATION

Preregistration for students currently enrolled is held each semester. Students who complete preregistration and who pay fees by the designated date are registered except in the event that they are declared academically ineligible at the end of the preceding semester. Graduate students receive notification from their advisors regarding an appointment time to discuss their schedule. They will be given a permit to preregister at the time of their appointments.

FULL–TIME STATUS

Graduate–Regular Term

Full–time status requires a minimum enrollment of nine credit hours. However, a graduate student may also be considered full–time when enrolled for less than nine hours if 1) the student holds a teaching or research assistantship or 2) is enrolled for one to three hours of thesis work or 3) is enrolled in GRC 600 (continuous enrollment), or 4) is enrolled in PSY 598, Internship. Half–time status begins with at least four and a half (4.5) credit hours. A student may not enroll beyond two terms of continuous enrollment (GRC 600). Summer counts as one regular term.

Graduate–Summer Term

Full–time status requires a minimum enrollment of four credit hours. However, a student may also be considered full–time when enrolled for less than four hours if 1) the student holds a teaching or research assistantship or 2) is enrolled for one to three hours of thesis work or 3) is enrolled in GRC 600 (continuous enrollment), or 4) is enrolled in PSY 598, Internship. Half–time status begins with at least four and a half (4.5) credit hours. One to three hours of thesis work may also qualify the student as half–time if approved in writing by the graduate dean. A student may not enroll beyond two terms of continuous enrollment (GRC 600). Summer counts as one regular term.

COURSE CREDIT

Graduate Courses Taken for Undergraduate Credit

Graduate courses at UNCW or other accredited institutions may be used to fulfill undergraduate requirements if approved by the student's academic advisor, department chair, undergraduate dean, and the dean of the graduate school. All other transfer credit policies apply. Permission forms may be obtained in the Graduate School or under "Graduate Forms" on the Graduate School home page at www.uncw.edu/grad_info/.

Graduate Courses Taken as an Undergraduate to Later Apply to a Graduate Degree

Undergraduate students who wish to take graduate courses and later receive graduate credit for them must (1) obtain permission in advance from their department chair and school dean, and (2) present it to the Graduate School for approval. Graduate courses taken under this provision may not be used to fulfill undergraduate degree requirements. Permission forms may be obtained in the Graduate School or under "Graduate Forms" on the Graduate School home page at www.uncw.edu/grad_info/.

Credit for Approved Combined Degree Programs

Graduate courses used to fulfill an undergraduate degree requirement at UNCW may be applied to a graduate degree only when taken as part of an approved combined degree program.

Courses applied toward an awarded degree may not be applied to a second degree except as described by specific degree programs.

Courses Approved for Undergraduate Credit Only

Courses approved for undergraduate credit only may not become a part of the graduate program, do not carry graduate course credit, and do not compute in the graduate GPA.

A graduate student who is required to take undergraduate courses, whether as a requisite for admission or for other reasons, or who takes such courses in the field of his or her graduate major, must make grades of at least B on all such courses in order to maintain eligibility as a graduate student.

A graduate student voluntarily electing to register for undergraduate courses may make any grade above F without jeopardy to his or her graduate standing, but all such courses are recorded as part of the official record.

Non-degree Credit

Graduate courses taken at this institution as a non–degree student before formal admission to graduate studies will meet course requirements for a graduate degree only if offered and approved as transfer credit. A maximum of 10 hours may be applied toward the degree.

Extension Courses (see section on Special Academic Programs).

Transfer of Course Credit

A maximum of six semester hours of graduate credit may be transferred from another accredited institution in partial fulfillment of the total hours required for the master's degree. Correspondence courses will not be accepted for transfer credit. When special circumstances warrant, students may petition the Graduate School for transfer of more than six semester hours. Each such petition must be accompanied by a statement of endorsement from the appropriate dean.

Grades earned on transferred work must be equivalent to B or better. Transferred credit will be accepted by the Graduate School only upon recommendation of the department or program in which the student is enrolled. The Graduate School must have an official transcript showing the satisfactory completion of courses offered for transfer credit. The courses must have been taken within the allowed time limits for the degree.

A graduate student who wishes to take one or more courses elsewhere for graduate degree credit must obtain prior approval from the appropriate department or program and the Graduate School.

Experiential Learning

The UNCW Graduate School will consider awarding transfer credit for experiential learning accepted for credit at another institution only if the experience was an integral part of a graduate program (e.g., internships, field experience) and was supervised and approved by the institution.

ADDING, DROPPING

Courses may be added or dropped only in the official drop/add period, which is noted in the current Schedule of Classes (http://www.uncw.edu/scheduleinfo).

WITHDRAWAL POLICY FOR GRADUATE STUDENTS

A student is allowed to withdraw from the university or from individual courses through the first week of the semester without having a grade entered on the academic record. From the second week through week twelve of the semester, any student who withdraws will receive a grade of W.

A grade of W will not affect the student's grade point average. Beginning with the thirteenth week of the semester, a grade of F will be assigned for each course withdrawal.

To withdraw from an individual class or classes, the student must report to the Graduate School before or on the last day for withdrawal as indicated in the university calendar of events. To withdraw from all classes, the student must process an official withdrawal form through the Graduate School. If the student is unable to appear in person to withdraw, written notice must be sent to the Graduate School.

Should extenuating circumstances warrant, the grade of F assigned for course withdrawal may be changed to a W. This determination will be made by the Graduate School. It is the student's responsibility to initiate the appeal. The decision of the dean is final and must be rendered prior to the end of the semester in which the withdrawal occurred.

GRADUATE GRADING

The University of North Carolina at Wilmington uses the quality point system and semester hour credit for calculating student achievement. Plus (+) or minus (-) grades may be awarded at the discretion of the faculty. Only courses approved by the Graduate Council will be eligible for S/U grading. Up to six credit hours of S/U may be applied to any degree program. Grade symbols and equivalent quality points used are the following:

Grade	Grade Point	
A	4.00 qp	Excellence
A-	3.67 qp	
B+	3.33 qp	
B	3.00 qp	Completely satisfactory
B-	2.67 qp	
C+	2.33 qp	
C	2.00 qp	Minimally acceptable
F	0 qp	Failure
S		satisfactory progress (thesis)
U		unsatisfactory progress (thesis)
I		work incomplete
W		withdraw passing

*Earned grade points = quality points

The grade point ratio is determined by dividing the accumulated number of grade points earned (quality points) by the accumulated number of quality hours.

GRADES OF INCOMPLETE

An incomplete grade may be given if the course instructor determines that exceptional circumstances warrant extending the time for the student to complete the course work. The instructor may set the maximum allowable period for completion of the course work, but in no case will the extension exceed one year. If the time allowed is to be less than one year, this information should be transmitted in writing to the student, with a copy to the Graduate School. If, within 12 months, a change of grade has not been submitted by the instructor, the incomplete automatically becomes an F.

RETENTION POLICY

Three grades of C, one grade of F, or one grade of U (thesis) results in dismissal from the graduate program. Further, if a student falls below a 3.0 GPA at any time, he or she goes on academic probation and has either three subsequent courses or nine hours to bring the GPA up to at least a 3.0. In addition, a student must have at least a 3.0 GPA in order to begin any program specific comprehensive examination and/or thesis work.

MINIMUM COMPETENCY REQUIREMENT

Individual graduate programs may designate certain courses as requiring minimum competence of B. Any student receiving a C in such a course must repeat it and receive a grade of B or better. Such courses may be repeated only once, and failure to receive a B or better grade in the repetition will result in dismissal from the graduate program. Both the initial C and subsequent grade will count in determining the GPA, but only the initial hours will count toward degree requirements.

POLICY ON REPEATING COURSES

A student who has received a grade of C in a graduate course may repeat that course once. Both the first and second grade will count in determining the GPA, but only the initial hours will count toward degree requirements. Students may not repeat a course in which they received a grade of A or B.

RETENTION BY APPEAL

Students who have been dismissed from the graduate program and readmitted by special action of the Graduate School shall have their subsequent retention policy determined individually by the dean.

AUDITING POLICY FOR GRADUATE STUDENTS

Auditing is considered the privilege to attend a class if space is available. The decision to allow auditing within the professional schools and graduate degree programs is the prerogative of the deans and the department chairs. Within those programs granting the auditing privilege, students must have the approval of the instructor and the appropriate department chair or dean prior to registering or adding the course(s) to their schedule. The student should consult the registrar for auditing registration dates. The audit will be considered part of the student course load. Tuition, fees, and enrollment procedures are the same as for credit enrollment.

Attendance, preparation, and participation in classroom discussions and activities are at the discretion of the instructor and the department. No credit is given, no examinations are required, and no grades are reported for audited courses. A formal record of the audit may be entered on the student's transcript at the discretion of the instructor. The procedure for dropping an audit course is the same as for credit enrollments. A course audit may not be changed to graduate credit.

GRADUATE INTERNSHIPS

Several units of the Graduate School offer students the opportunity to earn academic credit in a work environment. The purpose of the internship experience is to provide students the oppor-

tunity to integrate practical experience with classroom learning. Permission of the dean of the school/college or chair of a department, or director of a program offering the internship is required for enrollment. The Graduate School approves graduate internship policies. Information about specific graduate internships is available from graduate units offering the internships.

GRADUATION

A student must have no less than a 3.0 GPA on all graduate–level courses. Grades of A,B,C,F,S,U and W are permanent grades and can be changed only by the instructor with the approval of the appropriate dean in cases of arithmetical or clerical error or as a result of protest of grade.

PROCEDURE FOR PROTEST OF GRADE

Any student who protests a course grade shall first attempt to resolve the matter with the instructor involved. Failing to reach a satisfactory resolution, the student may appeal the grade in accordance with the procedures outlined below. Such appeals must be made not later than the last day of the next regular semester.

The student shall present the appeal in writing to the dean of the college or school within which the protested grade was awarded. By conferring with the student and the instructor, the dean will seek resolution by mutual agreement. Failing such resolution, the dean will transmit the written appeal to the Graduate School. The dean of the Graduate School will convene the Grade Appeals Committee.

The Grade Appeals Committee will consist of the graduate dean as chairperson and five members of the graduate faculty appointed by the graduate dean. If the committee affirms the instructor's decision, the graduate dean will notify in writing the faculty member, the student, and the appropriate dean. If the committee supports the student's appeal, it shall prescribe the method by which the student will be reevaluated. If the reevaluation results in a grade change, the established Course Grade Change procedure will be followed. The grade resulting from the reevaluation is final and may not be appealed further.

ACADEMIC GRIEVANCE PROCEDURE

Graduate students who have academic or procedural concerns, other than grades, should attempt to resolve those concerns at the lowest academic level as soon as possible (and no more than 90 days) after the event giving rise to the complaint. The first level for redress is with the appropriate faculty member. Within 30 days of failing to reach a satisfactory resolution with the faculty member, the student may appeal to the department chairman. Failing resolution at the department level, the student may, within 10 business days, appeal jointly to the dean for the student's academic area and to the dean of the Graduate School. The deans (or their designees) will conduct interviews with all parties to arrive at a resolution of the issue. The mutually agreed upon decision of the deans will be final and not subject to further appeal. Complaints that fall within the categories of sexual harassment, improper personal relationships, personal discrimination, unlawful workplace harassment, or workplace violence should be filed in accordance with Appendix J of the *UNCW Code of Student Life.*

FINAL EXAMINATION POLICY

University policy requires the scheduling of final examinations. Under this policy, the final examination schedule provides a three hour period for each examination and allows a maximum of three examinations per day. The length of the final examination, up to a maximum of three hours, is at the discretion of the instructor.

The final examination schedule is published at the beginning of each semester. Courses offered during the day have final examinations during the day (two per day). Night courses have final examinations at night (one per night).

A student who is scheduled to take three final examinations in one calendar day may have one rescheduled by notifying the three instructors and the appropriate deans of this desire at least

two weeks before the beginning of the final examination period. It will be the responsibility of the three instructors, working with the student, to reschedule one of the examinations and to so inform the student and the appropriate deans at least one week before the beginning of the final examination period.

Rescheduling of a final examination for an entire class requires the approval of the appropriate dean.

TRANSCRIPTS

Transcripts are issued by the Office of the Registrar to students at no cost. All requests for transcripts must be in writing and must include the student's signature. Transcript request forms may be printed from http://www.uncw.edu/reg/

INDEBTEDNESS

All indebtedness to the university must be satisfactorily settled before a diploma or transcript of record will be issued.

CHANGE OF NAME AND ADDRESS

It is the obligation of every student to notify the Office of the Registrar in writing of any change in name or permanent mailing address. Tuition bills are mailed to the permanent address; therefore, documentation supporting the change must be presented when the request is made. Address changes can also be done on SEAWEB.

SAFETY AND HEALTH PROGRAM

UNCW's safety program complies with the State Occupational Safety and Health Act of 1973.

MASTER'S DEGREE EXAMINATION

Every master's candidate must pass either a written comprehensive examination covering his or her field of study, or an oral comprehensive examination covering all course work required for the degree, or both, according to the decision of his or her department or school. The general expectation is that the comprehensive exam is taken near the end of coursework and in conformance with a schedule established by his or her department or school. If a thesis is required, a final oral defense of the thesis may be required in addition to the comprehensive examination, or as part of the oral examination.

A committee of at least three members of the graduate faculty (at least two of whom must be in the major program) evaluates the student's work for the master's degree, approves any thesis required, and administers any oral examination that may be given. If the student has a minor field of study, at least one member of the student's committee must represent the program of the minor.

A master's candidate who fails either a comprehensive written or oral examination may not take the examination a second time until at least three months have elapsed. No student may take an examination a third time without approval of the dean of the Graduate School. A student passes an examination only on approval by at least two–thirds of the members of the examining committee. The vote of the examining committee is considered to be final.

REGISTRATION FOR THESIS

Every student required to write a master's thesis must register for a minimum of three hours of thesis credit. A maximum of six credit hours for the thesis may be used toward course requirements for the master's degree. During each term that a student is working on a thesis, he or she should register for as many hours as are academically appropriate, except that, if the required hours of thesis credit have been taken, the student may register for GRC 600 (continuous enrollment) so long as this is the only course for which he or she is registered.

Any student engaged in thesis research and/or writing that involves the use of university faculty or facilities must be registered during the semester or summer session in which he or she is using faculty time or facilities, whether the student is in residence or not. Provided that no use of

university faculty and/or facilities is required, a student need not be registered in the semester in which the degree is to be awarded.

FOREIGN LANGUAGE REQUIREMENT

Foreign language requirements differ from one graduate degree program to another. At an early stage, a graduate student should consult his or her graduate program advisor concerning what foreign language, if any, will be required. The requirement for a student in a given program must be one of the options approved for that program by the Graduate School.

Each department or curriculum shall determine when a graduate student must fulfill a foreign language requirement, provided that such a requirement be satisfied before a student is admitted to candidacy. At the time a student requests admission to candidacy, his or her dean will be asked to certify on the application of candidacy that such a requirement has been met.

APPLICATION FOR ADMISSION TO CANDIDACY AND FOR THE DEGREE

A student in a master's degree program applies for admission to candidacy at the time of application for the degree. To be eligible for graduation each student must apply for a specific graduation on or before the deadline shown in the Calendar of Events. If a student has already applied for candidacy and for the degree, but fails to meet a deadline for a particular graduation, he or she must contact the Graduate School to specify a new graduation date.

DEGREE TIME LIMITS

A graduate student has five calendar years (masters) or six calendar years (Ph.D.) to complete his or her degree program. The period begins with the student's first term of work after formal admission to a degree–granting program. Work completed as a non–degree student does not initiate the five–year period for completing a degree program.

Courses taken more than five calendar years prior to the admission of a student into a degree program at UNCW normally are not accepted for credit toward fulfilling the requirements of the student's degree program. In some cases, however, with approval of the student's advisory committee and department/unit chair, a student may petition the Graduate School to accept for credit work that is more than five years old.

When extenuating circumstances warrant, an extension of the time limit for completing a graduate program may be granted to a student upon his or her petition to the Graduate School. Such petitions must include an explanation and the endorsement of the student's advisory committee and academic unit's chair or dean.

ACADEMIC HONOR CODE

The University of North Carolina at Wilmington is committed to the proposition that the pursuit of truth requires the presence of honesty among all involved. It is therefore this institution's stated policy that no form of dishonesty among its faculty or students will be tolerated. Although all members of the university community are encouraged to report occurrences of dishonesty, honesty is principally the responsibility of each individual.

Academic dishonesty takes many forms, from blatant acts of cheating, stealing, or similar misdeeds to the more subtle forms of plagiarism, all of which are totally out of place in an institution of higher learning. Reporting and adjudication procedures have been developed to enforce the policy of academic integrity, to ensure justice, and to protect individual rights. Complete details may be found in the current *Code of Student Life* and in the *Faculty Handbook*.

CLASS ATTENDANCE

Students are expected to be present at all regular class meetings and examinations for the courses in which they are registered. All faculty members are responsible for setting policy concerning the role of attendance in determining grades for their classes. It is the responsibility of the students to learn and comply with the policies set for each class in which they are registered.

THE GRADUATE SCHOOL

Robert D. Roer, *dean*

THE GRADUATE SCHOOL

The Graduate School at the University of North Carolina at Wilmington administers programs of study leading to the Master of Business Administration; the Master of Education; Master of Science in biology, chemistry, geology, instructional technology, mathematics, marine science and marine biology; Master of Arts in English, history, liberal studies, mathematics and psychology; the Master of School Administration; the Master of Arts in Teaching; the Master of Science in Accountancy; the Master of Fine Arts in creative writing; the Master of Science in Nursing, Master of Public Administration, Ph.D. in marine biology, and Post-Baccalaureate Certificate Programs in gerontology, environmental studies, and Hispanic studies.

Each of these programs provides capable students with an opportunity to pursue advanced study, training, and research designed to enhance their academic and professional development. More detailed description of these programs appears separately in the following pages.

ADMISSIONS

GENERAL ADMISSIONS REQUIREMENTS

For admission to a graduate degree program at the University of North Carolina at Wilmington, the applicant must (1) hold a bachelor's degree from an accredited college or university in this country or its equivalent in a foreign institution based on a four-year program; (2) have a strong overall academic record with a B average or better in the basic courses prerequisite to the area of proposed graduate study; and (3) present satisfactory scores on the specified examination. For information on the Graduate Record Examination (GRE), Graduate Management Admission Test (GMAT), or the Miller Analogies Test (MAT) contact the University Student Development Center. (Test scores more than five years old at the time of application will not be considered.) In addition, students who are taking, or have taken, graduate work elsewhere must be in good standing at that institution to be eligible to take graduate work at UNCW.

Applications for admission to most graduate degree programs should be filed in the Graduate School at least sixty (60) days in advance of the term in which admission is sought; some programs require earlier deadlines.

If admitted applicants do not register for the term specified in this application, their admission will be subject to review at a later date. A student who leaves the university and who does not register for at least one semester must apply for readmission to the Graduate School.

Each student admitted to a graduate degree program must have a completed medical report form on file at UNCW before initial registration may be effective. **In addition, an immunization record for each newly admitted UNCW graduate student, regardless of status, is required by law to be on file at UNCW prior to enrollment.**

Graduate students are subject to the same university policies and regulations as undergraduates unless otherwise stated.

Specific admission requirements are listed under each degree program.

REGULAR ADMISSION WITH DEFICIENCIES

A student whose grades and/or test scores and admissions portfolio are at an acceptable level but who does not have the undergraduate background expected by the academic unit and the Graduate School may be assigned deficiency courses. The letter of admission lists the deficiencies that must be completed before the student advances to candidacy. It may be required that some or all deficiencies be completed before the student enrolls in specific degree courses. Deficiency courses are taken in addition to those normally required for a degree.

PROVISIONAL ADMISSION

A student who does not meet minimum academic standards but has counterbalancing evidence to suggest the potential for success may be admitted on a provisional basis. Provisional admission provides an academic unit with more evidence on which to base its admission decision. A student must obtain a grade of B or better in all courses taken while in provisional status. Normally, the academic unit reviews the student's status following completion of nine hours of approved graduate study. At that time, the academic unit recommends to the Graduate School a change in status to either regular admission or withdrawal from the program. When students have completed their provisional requirements, they should check with their advisor to make sure that the change of status has been recommended. A student who has completed provisional requirements should check with the academic unit to verify that the change of status has been recommended. A provisional student may also be assigned deficiency courses.

NON-DEGREE STUDENTS (Special Graduate Status)

In some cases, students who are not seeking a graduate degree maybe permitted to take graduate courses. Such permission to take graduate courses does not constitute admission to a graduate degree program. Non-degree graduate students are not candidates for degrees. Enrollment must be maintained in at least one graduate course each semester. The undergraduate grade-point averages for non-degree graduate students are expected to meet the same standards that apply to the admission of graduate students in full standing. Students that are later accepted to a degree program may, with approval, have up to 10 hours applied toward the degree. Normally, non-degree status is not available and does not apply to students interested in taking courses in the Cameron School of Business Administration. Admission requirements may vary for each academic unit, and students seeking non-degree status therefore must determine and meet these conditions prior to completing their application. Any individual having an interest in applying for admission as a non-degree graduate student should contact the Graduate School.

RE-ENROLLING

A student who leaves the university and who does not register for at least one semester (fall or spring, not applicable for summer) must apply for readmission to the Graduate School. The re-enrollment forms are available in the Graduate School. No fee is required.

ADMISSIONS – INTERNATIONAL STUDENTS

International students must present evidence of their ability to speak, read, and write the English language and to meet fully the financial obligations associated with their study at the university. Students from foreign countries where English is not the primary language must present the results of the TOEFL examination (Test of English as a Foreign Language) as a part of their application for admission. A minimum score of 213 (computerized test) or 550 (paper test) is required for admission to all programs, but this score does not guarantee acceptance. A financial responsibility statement must also be submitted.

In addition to the TOEFL, international applicants who do not speak English as a primary language and who wish to become teaching assistants are required to demonstrate competence in oral communication skills if the teaching assistantship involves classroom instruction, laboratory instruction, or tutoring. A minimum score of 45 on the Test of Spoken English (TSE) examination of comparable score on an equivalent test is required to be eligible for an instructional assignment. Minimum score criteria may be higher for some graduate programs.

COOPERATIVE PH.D. PROGRAM IN MARINE SCIENCE (see Special Academic Programs section)

ADMISSIONS – SENIOR CITIZENS

Residents of North Carolina age 65 or older who meet applicable admission requirements may enroll tuition free on a space available basis. Students who wish to enroll under the provisions of

this law should document their senior citizen status at the time of registration. The availability of class space cannot be determined until after registration.

POLICY STATEMENT FOR GRADUATE STUDENTS WORKING ON CAMPUS

Graduate students may be employed as a teaching/research assistant or in another flat rate assignment on campus. Normally, these assignments do not exceed 20 hours per week during the regular fall or spring term. Additional hourly work on campus may be approved by the Graduate School on a temporary, case-by-case basis; however, the total assignment should not exceed 30 hours per week. Before approving all assignments the Graduate School verifies that the student is not on academic probation and that the assignment will not negatively impact the student's academic performance.

It is the responsibility of each academic unit to ensure that academic progress is a priority and work assignments do not interfere with a student's progress toward the degree.

NONDISCRIMINATION POLICY

UNCW is dedicated to equality of opportunity within its community. Accordingly, UNCW does not practice nor condone discrimination in any form against students, employees, or applicants on the grounds of race, color, national origin, religion, gender, age, disability or veteran status. UNCW commits itself to positive action to secure equal opportunity regardless of those characteristics. For additional information, contact the compliance officer.

Any student who supplies false or misleading information or who conceals pertinent facts in order to enroll in the University of North Carolina at Wilmington is subject to immediate dismissal from the university.

Application forms and other admissions information may be obtained by contacting the Graduate School, University of North Carolina at Wilmington, 601 South College Road, Wilmington, North Carolina 28403-5955, (910) 962-3135 or (910) 962-4117 phone, (910) 962-3787 fax. Application materials may also be found on the Graduate School Web page at http://www.uncw.edu/grad_info/

DEPARTMENT AND PREREQUISITE ABBREVIATIONS

The following standard list of abbreviations are used for stating department and prerequisite abbreviations.

Accountancy	ACG
Anthropology	ANT
Biology	BIO
Biology Lab	BIOL
Business Law	BLA
Chemistry	CHM
Chemistry Lab	CHML
Computer Science	CSC
Creative Writing	CRW
Economics	ECN
Education	EDN
English	ENG
Finance	FIN
Geology	GLY
Gerontology	GRN
History	HST
Instructional Technology	MIT
Liberal Studies	GLS
Licensure	LIC
Mathematics for middle grades education	MAE

Management	MGT
Marketing	MKT
Master of Business Administration	MBA
Mathematics	MAT
Marine Science	MSC
Nursing	NUR
Philosophy & Religion	P&R
Physics and Physical Oceanography	PHY
Production and Decision Sciences	PDS
Psychology	PSY
Public Administration	MPA
Science	SCI
Spanish	SPN
Statistics	STT

THE COLLEGE OF ARTS AND SCIENCES

Graduate programs in the College of Arts and Sciences lead to either a Ph.D. in marine biology, Master of Arts, Master of Fine Arts, Master of Public Administration, or a Master of Science degree. In addition, specialized curricula leading to the Master of Arts in Teaching degree are offered jointly by the College of Arts and Sciences and the Watson School of Education for professional educators. All programs in the college are designed to enhance the intellectual competence, maturity, and independence of the master's student, thereby preparing students for careers in business, industry, government, teaching, or for further study at the doctoral level.

MASTER OF SCIENCE IN BIOLOGY AND MARINE BIOLOGY

The Department of Biological Sciences offers programs of study leading to a Master of Science degree in biology and a Master of Science degree in marine biology. The programs are designed (1) to prepare students for further graduate work leading to the Ph.D.; (2) to provide professional biologists with advanced research and education opportunities; (3) to prepare students as managers of coastal and marine resources, trained to deal with contemporary problems in the environment; or (4) to provide a broad-based graduate program allowing for specialization in the diverse fields of inquiry represented by the faculty of the department. Teachers in secondary schools who wish to obtain graduate level teacher certification should check with the graduate coordinator in the School of Education to determine the current requirements for certification.

Admission Requirements

Applicants seeking admission to the graduate program in biology or marine biology are required to submit the following to the Graduate School:

1. An application for graduate admission
2. Official transcripts of all college work (undergraduate and graduate)
3. Official scores on the Graduate Record Examination (verbal, quantitative, analytical writing and subject test in biology)
4. Three recommendations by individuals in professionally relevant fields

Scores on the verbal, quantitative, analytical writing, and subject test in biology portions of the Graduate Record Examination (GRE) in the 50th percentile or above are desired. A bachelors degree in a field of biology from an accredited college or university in this country or its equivalent in a foreign institution based on a four-year program is required for admission, as well as an average of "B" or better in the undergraduate major. Undergraduate grades, GRE scores, and recommendations are used in concert to determine acceptability.

Degree Requirements

1. The program requires 30 semester hours of graduate study.
2. Six semester hours of credit may be transferred from another accredited institution. Grades earned on transfer work must be equivalent to "B" or better.
3. A minimum of 24 semester hours of graduate study must be completed in residence.
4. No more than nine hours of graduate level courses offered by other science departments at UNCW may be applied toward the degree.
5. No more than 12 credit hours from those courses crosslisted as 400/500 may be applied toward the degree. Undergraduate courses taken to make up deficiencies will not count toward the 30 hours required.
6. All deficiencies must be remedied prior to graduation.
7. The student must successfully complete a comprehensive examination based on prior coursework and an oral defense of the thesis.

8. Each student will present a thesis, based on original research, acceptable to the thesis advisory committee, prior to graduation.
9. Each student must complete an approved course of study within five years of the date of the first registration for graduate study.

Requirements for Master of Science Degrees

Core courses: required of all students seeking a Master of Science degree in biology or marine biology.

BIO 501	Methods in Scientific Research	(2)
BIO 599	Thesis	(3–6)

Master of Science in Biology

In addition to the core courses listed above, each student, in consultation with his/her thesis advisory committee, shall devise a program of study that meets the requirements below, complements the thesis research, and satisfies individual needs and interests.

Select two of the following:

a)	BIO 519	Advanced Topics in Cellular and Molecular Biology	(4)
b)	BIO 534	Advanced Ecology	(3)
	and		
	BIOL 534	Advanced Ecology Laboratory	(1)
c)	BIO 549	Advanced Topics in Animal Physiology	(4)

A minimum of 14 hours of elective credit; at least seven hours of which must come from the following list of electives. Graduate courses: BIO 512, BIOL 512, 519*, 526, 531, 534*, 538, 539, 544, 549*, 550, 551, 563, 575, 577, 578, 579, 580, 585, 590, 591, 594, 596 (*If not taken as a required course above).

Master of Science in Marine Biology

In addition to the core courses listed above, students shall complete the following courses and, in consultation with their thesis advisory committee, select electives to complete a program of study that meets individual needs and interests.

Select two of the following:

a)	BIO 534	Advanced Ecology	(3)
	and		
	BIOL 534	Advanced Ecology Laboratory	(1)
	or		
	BIO 549	Advanced Topics in Animal Physiology	(4)
	or		
	BIO 519	Advanced Topics in Cell and Molecular Biology	(4)
b)	BIO 560	Estuarine Biology	(4)
c)	BIO 564	Biological Oceanography	(3)
	BIOL 564	Biological Oceanography Lab	(1)

A minimum of 14 hours of elective credit; at least seven hours of which must come from the following lists of electives. Graduate courses: BIO 534*, 558, 560*, 561, 562, 563, 564*, 566, 575, 577, 578, 579, 580, 585, 590, 591, 594, 596 (*If not taken as a required course above).

Students wishing to be considered for entry into the Ph.D. program in marine biology should also consider:

BIO 601	Oceanography Core	(6)
BIO 602	Marine Biology Core	(6)

Ph.D. PROGRAM IN MARINE BIOLOGY

The Department of Biological Sciences offers a program of study and research leading to the doctor of philosophy in marine biology. The program provides students with a broad background and overview of the fields comprising marine biology and make use of the diverse interests of the marine biology faculty within the department. As is generally the case, the Ph.D. program is primarily a research degree. As such, it is intended to serve students with interests in conducting research in academia, industry, and government along with those who intend to become faculty in undergraduate teaching institutions, managers in technology-based industries and policy makers in government. Students will learn the process of identifying, defining and solving an original research problem. The program also includes a teaching practicum with classroom instruction in pedagogical techniques and technologies along with lecture experience under the guidance of a faculty mentor.

Admission requirements

Students will be admitted to the Ph.D. program by a majority vote of the Graduate Advisory Committee (GAC) of the Department of Biological Sciences based on eligibility requirements and available resources. Under ***most*** circumstances, students admitted to the program will have met the following requirements.

1. Received a M.S. degree or equivalent from an accredited university OR, if entering with a B.S., completed all the requirements for the M.S. marine biology degree at UNCW except submission of the bound thesis.
2. An overall graduate grade point average of at least 3.0 out of 4.0.
3. A score on the Graduate Record Examination General Test with a target of the 65th percentile or better (average for the verbal, quantitative and analytical writing sections), and a target of the 70th percentile or better in the Biology Subject Test.
4. a score of at least 550 on the paper version (213 on the computer version) of the Test of English as a Foreign Language (TOEFL) for applicants whose native language is not English.

Documents to be submitted for admission:

All applicants must submit:

1. An application for graduate admission
2. Official transcripts of all college work (undergraduate and graduate)
3. Official scores on the Graduate Record Examination (verbal, quantitative, analytical writing and subject test in biology)
4. Three recommendations with accompanying letters by individuals in professionally relevant fields, one from the intended faculty mentor.
5. Official score on the TOEFL (if applicable)
6. Current curriculum vitae
7. Detailed summary of M.S. thesis research (maximum of three pages)
8. Statement of interest for Ph.D. research (maximum of three pages)
9. Reprints or copies of any publications (if applicable)

Degree Requirements

1. The program requires 78 post baccalaureate (48 post - M.S.) semester hours of graduate study.
2. Six semester hours of credit may be transferred from another accredited institution. Grades earned on transfer work must be equivalent to "B" or better and must be approved by the GAC. The maximum amount of credit that a Ph.D. student may count toward a doctorate from a master's degree program is 30 semester hours. This applies whether the master's degree was earned at UNCW or elsewhere.
3. A minimum of 24 semester hours of graduate study must be completed in residence.

4. No more than 12 hours of courses that are crosslisted (500/400-level) can be counted toward the degree requirements.
5. Each student must pass (1) a written comprehensive examination approved by the Graduate Advisory Committee comprised of essay questions based largely on the core courses, and (2) candidacy examination consisting of an oral examination based on the student's dissertation topic and administered by the Dissertation Committee.
6. The student must complete and defend a dissertation based on a research program approved by the student's committee that results in an original, high quality, significant, and substantial body of research. The student must orally present and successfully defend the dissertation to the student's advisory committee in a defense that is open to the public.
7. All requirements for the degree must be completed within six years after admission to the Ph.D. program.

Requirements for the Ph.D. in Marine Biology

Core courses: required of all students seeking the Ph.D. degree in marine biology.

BIO 601	Oceanography Core	(6)
BIO 602	Marine Biology Core	(6)
BIO 690	Seminar	
BIO 694	Practicum in College Biology Teaching	(2)
BIO 699	Dissertation	(12)

In addition to the core courses, each student, in consultation with his/her dissertation committee, shall select a minimum of 15 hours of elective credit that may include graduate course work (subject to the 12-hour limit on cross-listed courses) and research hours (BIO 698).

GRADUATE PROGRAM IN BIOLOGICAL SCIENCES
Course Descriptions

BIO 501. Methods in Scientific Research (2) Scientific manuscript preparation and communication techniques: manuscript format, graphics, design of experiments, library use, oral presentation, and writing techniques. Two lecture hours each week.

BIO 512. Electron Microscopy and Cell Ultrastructure (3) Prerequisite: Course in cell biology or permission of instructor. A discussion of the general and specialized techniques of transmission and scanning electron microscopy and their application to the elucidation of the structure and function of cell organelles in plants and animals. Three lecture hours each week.

BIOL 512. Electron Microscopy Laboratory (1) Corequisite: BIO 512 and permission of instructor. Techniques for fixing, embedding and thin sectioning tissue. Students prepare tissue for observation and analysis and examine the tissue with the transmission electron microscope. Three laboratory hours each week.

BIO 519. Advanced Topics in Cellular and Molecular Biology (4) Prerequisite: Upper–level undergraduate or graduate course work in cellular and molecular biology or permission of the instructor. Selected topics in cellular and molecular biology. Includes: cytoskeletal components, membrane dynamics, cellular receptors, metabolism, gene expression, protein structure and function, molecular evolution and extrachromosomal DNA. Three lecture and three laboratory hours each week. May be taken more than once for credit under different instructors.

BIO 526. Advanced Topics in Microbiology (2-4) Prerequisite: Course in microbiology and organic chemistry or permission of instructor. Study of the taxonomy, morphology, metabolism, genetics and ecology of microorganisms. Emphasis is placed on the current microbiological literature.

Lecture and laboratory hours each week. May be taken more than once for credit under different instructors.

BIO 531. Population Genetics (3) Prerequisite: Course in genetics. Basic principles of the dynamics of genes within populations. Topics include fitness, polymorphism, genetic equilibrium, and the effects of non–random mating and selection. Three lecture hours each week.

BIO 534. Advanced Ecology (3) Prerequisite: Course in general ecology. Advanced topics in population dynamics, and community ecology. Current ecological theory on population regulation and community dynamics will be examined using a combination of literature readings, class discussion, and formal lectures. Three lecture hours each week.

BIOL 534. Advanced Ecology Laboratory (1) Corequisite or prerequisite: BIO 534. Approaches to analysis and interpretation of ecological data. Using sample and real data sets, various analytical approaches for examining population and community patterns will be examined. Estimation opf theoretical parameters from data will also be explored.

BIO 538. Cytogenetic Methodology (2) Prerequisite: Course in genetics. Laboratory course introducing techniques for studying and analyzing the chromosomes of a variety of organisms including plants and animals. Four laboratory hours each week.

BIO 539. Advanced Topics in Population Biology (2–4) Prerequisite: Courses in genetics and ecology or permission of instructor. Study of the ecology, genetics, and evolution of populations. Topics include dynamics of population structure, growth, and regulation; natural selection and the maintenance of genetic variation within populations; differentiation of populations and speciation; evolution of population strategies. Lecture hours each week. May be taken more than once for credit under different instructors.

BIO 544. Developmental Biology (4) Prerequisite: Course in genetics. Concepts of mechanism and control during embryo development and morphogenesis. Topics include differential gene activity, hormones and other growth substances, and cell surface phenomena. Current primary research literature is stressed. Three lecture and three laboratory hours each week.

BIO 549. Advanced Topics in Animal Physiology (4) Prerequisite: Permission of instructor. Study of topics in animal physiology for which significant new understanding has been obtained. Consideration is given to those emergent techniques that have permitted the application of scientific methodology to particular physiological problems. Three lecture and three laboratory hours each week. May be taken more than once for credit under different instructors.

BIO 550. Systematic Biology (3) Prerequisites: A course in statistics is strongly recommended. A survey of methods used in systematic investigations including phylogenetic, cladistic, and eclectic approaches to the analysis of molecular, allozymic, cytogenetic, morphometric, and discrete plant and animal data sets. Nomenclatorial rules and procedures are discussed. Three lecture hours each week.

BIO 551. Advanced Vertebrate Biology (2) Prerequisite: Permission of instructor. Individualized instruction in the identification, classification, and ecology of the terrestrial vertebrates of the coastal zone with emphasis on field methodologies. Designed to fill gaps in each student's knowledge of the classes of terrestrial vertebrates. Four laboratory hours each week.

BIO 558. Biology of Recreational and Commercial Fishes (3) Prerequisite: Course in ichthyology and permission of the instructor. A study of the major groups of fishes and invertebrates utilized in fisheries, with emphasis on the biology, economic importance, and management of selected

groups. Topics focus on contemporary management strategies and needs. Two lecture and three laboratory periods each week.

BIO 560. Estuarine Biology (4) Prerequisite: Course in general ecology or permission of instructor. An examination of the unique physical, chemical, and biological interactions within estuaries, emphasizing nutrient cycles and energy flows. Three lecture and three laboratory hours each week.

BIO 561. Barrier Island Ecology (3) Prerequisite: Course in general ecology or permission of instructor. Survey of vegetation and physiography of barrier islands. Two lecture and three laboratory hours each week.

BIO 562. Wetlands of the United States and their Management (3) Prerequisite: Course in general ecology or permission of the instructor. Ecology and management of wetlands and adjacent communities. Examination of methods used to restore and create wetlands. Two lecture and four laboratory hours each week.

BIO 563. Coral Reef Biology (4) Ecology and physiology of coral reef organisms, emphasizing processes that contribute to the diversity and complexity of coral reef ecosystems. Reef formation, coral biology and physiology, ecological, interactions, man's effects, conservation and global change.

BIO 564. Biological Oceanography (3) Prerequisite: Permission of instructor. Discussion of the recent oceanographic literature concerning nutrient cycling, distribution and regulation of oceanic productivity, and advances in methodologies used to study oceanic processes and controlling factors. Three lecture hours per week.

BIOL 564. Biological Oceanography Laboratory (1) Corequisite: BIO 564. Laboratory and field investigations of oceanographic problems, including instruction in standard analytical techniques, experimental design, and analysis, with an emphasis on biological responses to physical and chemical factors. Three laboratory hours per week.

BIO 566. Behavioral Ecology of Reef Fishes (3) Prerequisite: Course in ichthyology or permission of instructor. An ecological and ethological approach to the study of reef fishes, including theories and problems dealing with ecological niche, competition, social systems, and population biology. Two lecture and three laboratory hours each week.

BIO 568. River Ecology (3) Prerequisite: course in general ecology or permission of instructor. The biology, ecology, chemistry, and physical nature of streams, rivers, and watersheds. Biodiversity, endangered species, pollutants, the regulatory structure, and river politics will be discussed. Three combined lecture and lab hours per week, plus field trips to local rivers, streams and tidal creeks.

BIO 575. Taxonomy of Aquatic and Wetland Plants (3) Prerequisite: Course in plant taxonomy or permission of instructor. Discussion, collection, and identification of vascular plants found in the aquatic and wetland habitats of coastal North Carolina. Extensive field work and individualized instruction in collection and identification techniques. Two lecture and three laboratory hours each week.

BIO 577. Experimental Mycology (3) Prerequisite: Graduate status. An accelerated introduction to general mycology with emphasis on the role of fungi as friend and foe in various ecosystems. The use of fungi as experimental tools as well as modern technology useful to their study are considered. Two lecture and three laboratory hours each week.

BIO 578. Biology of Harmful Algae (3) Prerequisite: BIO 205, BIO 446, or consent of instructor. Identification (taxonomy), ecology, physiology and toxin production by both marine and freshwater microalgae. Toxin structure and mode of action, effects on humans and public health, environmental damage and possible mitigation/management strategies.

BIO 579. Advanced Topics in Organismic Biology (2–4) Prerequisite: Permission of instructor. Advanced study of the ecology, natural history, behavior, or systematics of selected groups of organisms. Lecture and laboratory hours each week. May be taken more than once for credit under different instructors.

BIO 580. Field Studies in Biology (1–6) A research experience–oriented field course offered in selected regional locales. Emphasis is placed on distribution, taxonomy, and ecology of animal and/or plant organisms.

BIO 585. Special Topics in Advanced Biology (1–6) Designed to deal with selected topics not considered in detail in regular course offerings. More than one topic may be taken for credit.

BIO 590. Biomechanics (4) Prerequisite: Course in animal biology. A study of the interactions of organisms with their physical environment. Concepts from fluid and solid mechanics are applied to biological form and function. Three lecture and three laboratory hours each week.

BIO 591. Directed Independent Study (1–3)

BIO 594. Practicum in College Biology Teaching (2) An introduction to theory, research, and practice in college biology teaching. Combines supervised internship in introductory biology with formal classroom instruction. For graduate students who have been awarded teaching assistantships in the Department of Biological Sciences and others with permission of instructor.

BIO 596. Critique of Scientific Literature (1) Review and critique of grant proposals, manuscripts, and published papers pertaining to biological research.

BIO 599. Thesis (1–6)

BIO 601. Oceanography Core (6) Team-taught series of course modules covering physical oceanography, chemistry of seawater, marine geological processes, and diversity of life in the sea. Six lecture hours per week (Fall semester).

BIO 602. Marine Biology Core (6) Team-taught series of course modules covering evolution and systematics of marine organisms, marine ecology, physiological and biochemical adaptations of marine organisms, marine microbiology, estuarine biology, deep sea biology, coral reef biology, planktonology, and marine mammalogy. Six lecture hours per week (Spring semester).

BIO 690. Seminar (1) For resident students, attendance at departmental seminars is required. Candidates are required to present two scientific seminars at UNCW within four years of residency. Candidates are expected to orally present their research at other institutions or (inter-) national scientific meetings. Credit is awarded during the candidate's last semester of residency.

BIO 694. (594) Practicum in College Biology Teaching (2) An introduction to theory, research, and practice in college biology teaching. Combines supervised internship in biology teaching with formal classroom instruction. For graduate students who have been awarded teaching assistantships in the Department of Biological Sciences and others with permission of instructor. Ph.D. students will be required to engage in limited formal instruction. Two semester hours per week.

BIO 698. Research (1-6) Credit hours taken by students in pursuing their dissertation research. May be taken more than once for credit.

BIO 699. Dissertation (1-12) Credit hours taken by students in analyzing their research data and writing their dissertation.

MASTER OF SCIENCE IN CHEMISTRY

The Department of Chemistry offers a program of study leading to the Master of Science degree in chemistry. The objectives of this program are to give students who have an undergraduate foundation in chemistry the opportunity to engage in advanced course work, in–depth study, and independent research in order to acquire the skills of assimilating known information and generating new knowledge. These problem–solving skills provide the foundation for future contributions by the graduates in various areas of chemistry, whether they seek employment directly or choose to undertake further graduate study elsewhere.

Admission Requirements

Applicants seeking admission to the graduate program in chemistry are required to submit the following to the Graduate School:

1. An official application for graduate admission
2. Official transcripts of all college work (undergraduate and graduate)
3. Official scores on the Graduate Record Examination (verbal, quantitative, analytical writing)
4. Three recommendations by individuals in professionally relevant fields

An acceptable score on the Graduate Record Examination is expected. A bachelor's degree with a concentration in chemistry from an accredited college or university in this country, or its equivalent in a foreign institution based on a four–year program, is required for admission, along with a "B" average or better in chemistry courses. Admission decisions are based upon several factors, and where other indicators of success warrant, individuals who fall below the established criteria in one of the areas may be considered for admission.

Degree Requirements

1. Programs leading to the Master of Science degree require a minimum of 30 semester hours of graduate study. No more than 12 credit hours from those courses cross listed as 400/500 may be applied toward the degree. Up to eight hours of graduate courses offered by other departments may be approved by the student's advisory committee. A maximum of six hours of credit may be transferred from another accredited institution. Grades earned on transfer work must be equivalent to a "B" or better, and courses must be acceptable to the student's advisory committee. A minimum of 24 semester hours of graduate study must be completed in residence.
2. Deficiencies in a student's undergraduate preparation will be ascertained by a committee of faculty members in the Department of Chemistry. Placement tests in the basic areas of chemistry may be administered to incoming students at the discretion of the faculty committee to assist with evaluation of deficiencies. Any deficiencies must be remedied prior to graduation.
3. A thesis reporting the results of the student's original research project must be submitted by the student and approved by the student's advisory committee. Each student will present a seminar on his or her proposed research project
4. The student must successfully complete a comprehensive examination and an oral defense of the thesis.
5. The program shall be completed within five years of the date of first registration for graduate study.

Required Core Courses

CHM 501 Introduction to Chemical Research (2)
CHM 595 Graduate Seminar (2)
CHM 599 Thesis (3-6)
And at least three of the following courses:
CHM 516 Advanced Organic Chemistry (3)
CHM 521 Advanced Physical Chemistry (3)

CHM 536	Advanced Analytical Chemistry (3)
CHM 546	Advanced Inorganic Chemistry (3)
CHM 568	Advanced Biochemistry (3)

GRADUATE PROGRAM IN CHEMISTRY
Course Descriptions

CHM 501. Introduction to Chemical Research (2) Scientific proposal and manuscript preparation. Communication techniques. Experimental design and data analysis. Computer applications. Library use. Laboratory safety. Two hours each week.

CHM 512. Nuclear Magnetic Resonance Spectroscopy (2) Prerequisite: Two semesters of organic chemistry. Interpretation and acquisition of proton and carbon, one and two dimensional NMR spectra. Molecular structure elucidation of organic molecules using NMR spectroscopy. One hour of lecture and two hours of lab per week.

CHM 516. Advanced Organic Chemistry (3) Prerequisite: Two semesters of organic chemistry. Study of contemporary synthetic organic chemistry. Topics may include chiral synthetic methods, natural products synthesis, bioorganic chemistry, relationships between structure and reactivity and the role of reactive intermediates, with emphasis placed on examples from the recent literature.

CHM 517. (417) Medicinal Chemistry (3) Prerequisite: Two semesters of organic chemistry. Systematic study of the chemistry and biological activity of hormones, vitamins, drugs affecting the nervous system, and other miscellaneous agents.

CHM 521. Advanced Physical Chemistry (3) Prerequisite: CHM 520 (420) or equivalent. The study of quantum statistical mechanical basis of thermodynamics, including the behavior of solids and liquids. Kinetics of chemical reactions, particularly the microscopic picture of chemical reactions based on quantum statistical mechanics.

CHM 522. Rates and Mechanisms (3) Prerequisite: Physical chemistry. Chemical kinetics and reaction mechanisms. Transition state and collision theories. Catalysis.

CHM 525. (425) Computational Chemistry (3) Prerequisite: Physical chemistry. Theory and practice of computational chemistry, including molecular mechanics, semi-empirical and ab initio molecular orbital theory, density functional theory, and molecular dynamics. Two hours of lecture and two hours of computer lab hours each week.

CHM 536. Advanced Analytical Chemistry (3) Prerequisite: Organic chemistry, quantitative analysis. Application of modern analytical methods to chemical problems. Emphasis upon chemical information, structural and quantitative, obtainable from these techniques. Topics may include modern spectroscopic, chromatographic, electrochemical, or bioanalytical techniques.

CHM 545. (445) Inorganic Chemistry (3) Prerequisite: Physical chemistry and quantitative analysis, or equivalent. Study of periodic relationships: crystal lattice theory; transition metals and ions; crystal field theory; organometallic structures and reactions; and reaction mechanisms.

CHM 546. Advanced Inorganic Chemistry (3) Prerequisite: CHM 545 or equivalent. Study of contemporary inorganic chemistry. Topics may include organometallic, bioinorganic chemistry, group theory, and/or current topics in contemporary inorganic chemistry.

CHM 567. (467) Biochemical Techniques and Instrumentation (2) Prerequisite or corequisite: CHM 365 or equivalent. Theory and practice of advanced biochemical techniques. Topics may include

buffer and reagent preparation, protein assay, protein purification, electrophoresis, enzyme kinetics, vesicle construction, DNA isolation, and molecular visualization and modeling. Four hours each week.

CHM 568. Advanced Biochemistry (3) Prerequisite: CHM 365 or equivalent and CHM 321. Topics may include protein structure, stability, and visualization, enzyme kinetics and mechanisms including enzyme activators, inhibitors, and inactivators, ligand recognition and binding, and enzyme regulation.

CHM 574. Aquatic Chemistry (3) Prerequisite: Permission of the instructor. The chemistry of aqueous solutions, including use of activity coefficients, acid-base and buffer concepts, gas solubility, results of carbon dioxide dissolution, trace metal speciation, oxidation-reduction processes, photochemistry and mineral solubility. Concepts will be applied to laboratory solutions and natural waters.

CHM 575. Chemical Oceanography (3) Prerequisite: General chemistry. An oceanography course is recommended. Sources, distribution, forms of occurrence, and reactions of chemical species in seawater. Chemistry of concentrated aqueous solutions. Patterns of global ocean circulation. Air-sea and sediment-seawater interactions. Estuarine processes and reactions. Human impact on the oceans.

CHM 576. (PHY 576) Chemical and Physical Analysis of Seawater (3) Prerequisite: Permission of instructor. Study of modern chemical and physical measurements of seawater including salinity, alkalinity, pH, nutrients, and dissolved oxygen. Several class periods may also be devoted to working aboard an oceanographic research vessel while at sea.

CHM 578. (478) Aquatic Toxicology (3) Prerequisite: Organic Chemistry. Topics in aquatic toxicology, including toxicity testing; transport, transformation and ultimate distribution and fate of chemicals in the aquatic environment; and the performance of hazard risk assessments on aquatic ecosystems exposed to chemical insult.

CHM 579/MSC 579. Role of the Oceans in Human Health (3) Prerequisite: CHM 212, BiO 110, or consent of instructor. Discovery, structure, and biological activity of marine bioactive compounds, chemotaxonomy, pharmaceutical leads, marine biotoxins, structure, mode of action, regulation and monitoring, the producing organisms, how (biosynthesis) and why these compounds are made. Two lectures per week.

CHM 585. (485) Industrial and Polymer Chemistry (3) Prerequisites: Physical chemistry and two semesters of organic chemistry. Properties, synthesis, and reactions of major industrial chemicals; synthetic plastics, soaps and detergents; petrochemicals; paints and pigments; dyes; pharmaceutical and nuclear industries; mechanism of polymerization; copolymerization; physical and chemical properties of polymers; polymer characterization; advances in polymer techniques.

CHM 590. Special Topics (1–3) Study of a topic or technique in chemistry not covered in regular courses. May be repeated for credit.

CHM 591. Directed Individual Study (1–6) Directed Independent Study.

CHM 595. Graduate Seminar (1) Discussion by students, faculty, and guest lecturers of research ideas and/or research results. May be repeated two times for credit.

CHM 599. Thesis (3–6) Laboratory research for thesis and thesis preparation.

NOTE: Additional courses offered by the Department of Chemistry are found under "science courses" in the section on "Additional Graduate Courses."

MASTER OF FINE ARTS IN CREATIVE WRITING

The Department of Creative Writing offers an intensive studio-academic apprenticeship in the writing of fiction, poetry and creative nonfiction leading to the Master of Fine Arts degree in creative writing. Courses include workshops in the three genres, special topics and forms courses, as well as a range of courses in literature. While students are accepted in, and expected to demonstrate mastery of, one genre, they are encouraged to study, and must show proficiency in, a second genre. Students, in consultation with their advisors, tailor their course schedules to their own professional and educational interests, selecting a variety of courses in creative writing, literature, criticism, rhetoric and composition, film studies, and applicable cultural studies. Though the M.F.A. is a terminal degree designed for writers wishing to pursue various career paths in teaching, writing, publishing, and community arts organization, students are urged to pursue the degree primarily as a way of mastering their art by rigorous study and practice among a community of other dedicated writers. The M.F.A. degree without supporting publication credentials does not guarantee employment.

Admission Requirements

Applicants seeking admission to the Master of Fine Arts Program in Creative Writing are required to submit the following five items to the Graduate School before the application can be processed.

1. A typed manuscript in the applicant's primary genre, labeled "poetry," "fiction," or "creative nonfiction": 15 pages of poetry, 30 pages of fiction, or 30 pages of creative nonfiction (double-space prose, single-space poetry). The manuscript should demonstrate mastery of basic craft and unmistakable literary promise. Applicants are advised not to apply with a mixed-genre manuscript.
2. An application for graduate admission.
3. Official transcripts of all college work (undergraduate and graduate).
4. At least three recommendations from individuals in professionally relevant fields addressing the applicant's achievement and promise as a writer and ability to successfully complete graduate study.
5. An essay (300-500 words) on the applicant's goals in pursuing the M.F.A., including previous educational experience and information relevant to any teaching assistantship application.

An applicant must have successfully completed an appropriate undergraduate degree (usually, but not necessarily, a B.A. in English or a B.F.A in creative writing), with at least a "B" average in the major field of study. Acceptable fulfillment of all the above constitutes the minimum requirements for, but does not guarantee, admission to the M.F.A. program.

In general, we are seeking candidates who show artistic commitment and literary promise in their writing and whose academic background indicates they are likely to succeed not only in graduate study but as publishing professional writers. Therefore, in evaluating candidates, the admissions committee places great emphasis on the quality of the manuscript.

The deadline for receiving applications is February 1 for the academic year beginning fall semester. All interested applicants will be considered for graduate assistantships, which will be awarded on a competitive basis as they become available. Applicants seeking graduate assistantships are urged to complete their applications well before the deadline.

Degree Requirements

1. An M.F.A. candidate must successfully complete a minimum of 48 semester hours of graduate study: 21 hours in writing; six hours of thesis; and 21 hours in other graduate literature courses, (CRW 501, 503, 543, 545, 547, 580, 581, 598; ENG 502, 503, 504, 505, 506, 507, 508, 509, 511, 512, 513, 514, 552, 555, 560, 561,563, 572, 580) with an option of substituting up to six of those hours of study in a related discipline, as determined by the student's advisor, the MFA coordinator, and the chair of the Department of Creative Writing.

2. A maximum of six semester hours of graduate course credit may be transferred from another accredited institution in partial fulfillment of the M.F.A. UNCW regulations will be applied in determining the transferability of course credits, and requests for transfer credit must be approved by the MFA coordinator, the chair of the Department of Creative Writing, and the Graduate School.
3. An M.F.A. candidate is required to complete at least 12 hours of writing workshop in a primary genre, and at least five hours of workshop in a secondary genre.
4. A minimum GPA of 3.0 (on a 4.0 scale) must be maintained in all graduate course work; a "B" average is required for graduation.
6. An M.F.A. candidate must complete a substantial book-length thesis manuscript of literary merit and publishable quality acceptable to the thesis committee: this ordinarily will be a novel; a novella; a collection of short stories, poems, or essays; a single long poem; a long nonfiction narrative; or some combination of the foregoing.
7. An M.F.A. candidate must pass the Master of Fine Arts examination.
8. All requirements must be completed within five calendar years.

GRADUATE PROGRAM IN CREATIVE WRITING
Course Descriptions

CRW 501. Research for Creative Writers (3) Instruction for writers of creative nonfiction, fiction, poetry, and scripts in searching electronic, print, and physical archives; historical artifacts; the geographical and built environment; and living sources, with special emphasis on interviewing techniques and ethics and on how to gracefully integrate research into artistic writing.

CRW 503. Creative Writing Pedagogy: Theory and Practice (3) Analysis of current theories of creative writing pedagogy and classroom practices; examination of teaching and learning theories related to the workshop model, process exercises, revision techniques, and the group dynamics of teaching creative writing.

CRW 530. Creative Writing Workshop (1-3) Instruction in at least two of the following genres: Fiction, Poetry, Creative Nonfiction, Scriptwriting. Focus determined by instructor. Includes classroom critique of students' work and work by professionals. M.F.A. students may repeat for credit without limit.

CRW 542. Poetry Writing Workshop (1-3) Instruction in writing poetry, with classroom critique of students' work and work by professionals. Includes study of publishing markets. M.F.A. students may repeat for credit without limit.

CRW 543. Forms of Poetry (1-3) Instruction in specific formal issues in the tradition of poetry. Assignments will include original poetry, extensive reading, and may also include writing critiques, papers, exercises, etc. May be repeated once for credit.

CRW 544. Fiction Writing Workshop (1-3) Instruction in writing fiction, with classroom critique of students' work and work by professionals. Includes study of publishing markets. M.F.A. students may repeat for credit without limit.

CRW 545. Forms of Creative Nonfiction (1-3) Instruction in specific formal issues in the tradition of nonfiction. Assignments will include original nonfiction, extensive reading, and may also include writing critiques, papers, exercises, etc. May be repeated once for credit.

CRW 546. Workshop in Writing the Novel I (3) Instruction in conceiving, outlining, and writing the novel, with special emphasis on structure and narrative design. Includes classroom critique of student writing as well as study of published novels and writings on aesthetics.

CRW 547. Forms of Fiction (1-3) Instruction in specific formal issues in the tradition of fiction. Assignments will include original fiction, extensive reading, and may also include writing critiques, papers, exercise, etc. May be repeated once for credit.

CRW 548. Workshop in Writing the Novel II (3) Prerequisite: CRW 546 or consent of instructor. Instruction in developing, writing, and finishing the novel, with special emphasis on continuity and profluence. Includes classroom critique of student writing as well as study of published novels and writings on aesthetics.

CRW 550. Workshop in Creative Nonfiction (1-3) Instruction in writing essays, articles, and/or memoirs, with classroom critique of students' work and work by professionals. Includes study of publishing markets. M.F.A. students may repeat for credit without limit.

CRW 580. Special Studies in Creative Writing (1-3) Intensive examination of a special area of creative writing. May be repeated for credit under different subtitles.

CRW 581. Studies in International Writing and Translation (1-3) Intensive examination of specific formal issues in international writing and translation. Assignments will include extensive reading, and may also include translation projects, written critiques, papers, and exercises. May be repeated once for credit.

CRW 591. Directed Independent Study (1-3) Students must secure permission of the graduate coordinator. May be taken twice for credit. May not be taken concurrently with CRW 599 or used for thesis research.

CRW 598. Internship in Applied Creative Writing (1-6) Prerequisite: 12 hours of graduate course credit or permission of instructor. Maximum hours for degree credit is six hours. Supervised professional experience in an area of creative writing studies including but not limited to editing, publishing, writing, writing instruction, and film production. Specific goals and assignments to be set and evaluated by instructor.

CRW 599. Thesis (1–6)

MASTER OF ARTS IN ENGLISH

The Department of English offers a program of study leading to the Master of Arts degree in English. Specific goals of the program are (1) to provide advanced research and educational opportunities in English studies; (2) to provide a broad-based graduate program that will provide students with opportunities to specialize in historical and contemporary critical approaches to literature, language and literacy, rhetoric and composition, film studies, pedagogy, and professional, technical, and electronic writing; and (3) to prepare students for further graduate work leading to the Ph.D.

Admission Requirements

Applicants seeking admission to the graduate program in English are required to submit the following to the Graduate School (all five items MUST be received by the Graduate School before the application will be forwarded to the department for action):

1. An application for graduate admission
2. Official transcripts of all college work (undergraduate and graduate)
3. Official scores on the verbal, quantitative, and analytical writing sections of the Graduate Record Examination (no more than five years old)
4. Three recommendations by individuals in professionally relevant fields, addressing the applicant's demonstrated academic skills and/or potential for graduate study.
5. A writing sample (8-10 pages) of critical/analytical prose.

The minimum requirements for acceptance are the following: an acceptable score on the Graduate Record Examination, a satisfactory response to the essay question attached to the application form, a bachelor's degree from an accredited college or university or its equivalent in a foreign institution based on a four-year program, and a strong overall academic record with a "B" average or better in the undergraduate major. However, meeting minimal GRE scores and grade requirements does not in itself guarantee admission. Applicants who are not undergraduate English majors must have completed 12 hours of upper level English courses or have this requirement waived by the graduate coordinator.

The deadline for receiving applications is March 1 for the fall semester and November 1 for the spring semester. All interested applicants will be considered for graduate assistantships, which will be awarded on a competitive basis when they become available. Applicants seeking graduate assistantships are urged to complete their applications well before the deadline.

Degree Requirements

1. The M.A. program requires a minimum of 30 semester hours of graduate study, including ENG 501, Introductory to Research Methods in English; either ENG 502, Introduction to Literary Theory, or ENG 552, Rhetoric and Culture; ENG 597, Thesis Writing Workshop (3); and ENG 599, Thesis (3).
2. Students may take one graduate course outside of English in any area, such as history or liberal studies. In addition, students may substitute CRW 580 and/or one CRW writing workshop for non-MFA students for English courses.
3. At least 24 semester hours must be completed in residence at UNCW; a maximum of six semester hours may be transferred from another accredited institution or from coursework taken as a non-degree student at UNCW. Grades on transfer work must be equivalent to a "B" or better.
4. A written comprehensive exam must be successfully completed.
5. The student will present and defend a thesis, acceptable to the student's advisory committee, prior to graduation. The thesis defense will be open to the public.
6. Students must complete the program within five years of the date of first registration for graduate study.

GRADUATE PROGRAM IN ENGLISH
Course Descriptions

ENG 501. Introduction to Research Methods in English (3) English majors only or consent of instructor. Analysis of the content of English studies, stressing bibliographic tools and the aims and methods of literary and writing research.

ENG 502. Introduction to Literary Theory (3) English majors only or consent of instructor. Analysis of the philosophical, historical, and social foundations of literary theory. Emphasis on problems of meaning, interpretation, and evaluation. Examination of relevant critical figures and schools in historical context.

ENG 503. Theory and Practice of Teaching Composition (3) English majors only or consent of instructor. Critical analysis of current composition theories and classroom practices; examination of teaching and learning theories related to composition courses. Required for second-semester graduate teaching assistants.

ENG 504. (430) The Age of Chaucer (3) A survey of works written in medieval England. Included are The Canterbury Tales, selections from Chaucer's other works, and representative works in such genres as chronicle, biography, epic, romance, dream vision, and drama.

ENG 505. (431) The Age of Elizabeth (3) English literature in the sixteenth and early seventeenth centuries. Works studied include poetry by Spenser and Shakespeare, plays by Marlowe and Jonson, and prose by More and Sidney.

ENG 506. (432) The Age of Milton (3) Emphasis on the works of Milton. Also includes works by Donne, Herbert, and Bacon.

ENG 507. Studies in Short Fiction (3) Study of short fiction as a genre. May focus on an author, theme, period, the short story, the novella, traditions, conventions, or forms. May be repeated for credit under a different subtitle.

ENG 508. Studies in Nonfiction (3) Study of nonfiction prose. May focus on a form such as biography, autobiography, memoir, the journal, or various forms of essays. May be repeated for credit under different subtitles.

ENG 509. (490) Topics in Literature (3) The study of a selected theme, movement, period, influence, or genre. Content varies from semester to semester. May be repeated for credit under different subtitle.

ENG 511. Studies in the Novel (3) Study of the novel as a genre. May focus on the history of the novel, major authors, a theme, a period, narrative technique, or form. May be repeated for credit under a different subtitle.

ENG 512. Topics in Cinema (3) Study of a selected filmmaker, genre, period, style, or theme in film. May be repeated for credit under a different subtitle.

ENG 513. Studies in Poetry (3) Study of poetry as a genre. May focus on an author, theme, period, poetic form, or traditions and conventions. May be repeated for credit under a different subtitle.

ENG 514. Studies in Drama (3) Study of drama as a genre. May focus on an author, theme, period, dramatic form, or traditions and conventions. May be repeated for credit under a different subtitle.

ENG 525. Topics in Linguistics (3) In–depth study of a topic in linguistics. May be repeated for credit under a different subtitle.

ENG 551. Topics in Professional Writing (3) Advanced instruction in writing for a particular field, including but not limited to business, science, and technology. May be repeated for credit under a different subtitle.

ENG 552. Rhetoric and Culture (3) Theoretical analysis of significant developments in the history of rhetoric from Plato and Aristotle to Kenneth Burke and Helene Cixous with emphasis on the influence of rhetoric on written composition.

ENG 553. Topics in Rhetoric and Literacy (3) Study of a topic in rhetoric or literacy. Topics vary; typical offerings might include the work of one or more theorists or theories, current issues in the field of literacy studies, or other themes. May be repeated for credit under a different subtitle.

ENG 554. Theories and Practices of Critical Literacy (3) Analysis of theories related to literacy development and instruction, and critique of related teaching and learning practices with special emphasis on historical, cultural and ideological issues.

ENG 555. Language, Meaning and Culture (3) Analysis of theories of language, communication, and culture with emphasis on application of these theories to oral and written texts in a variety of contexts.

ENG 556. Ethnography in English Studies (3) A practical and theoretical introduction to qualitative/ethnographic literacy research with focus on ethical issues and methodologies. Students will design, conduct, and write full-length, contextual studies of literacy.

ENG 557. Theory and Practice of Technical Communication (3) Principles and practices of technical communication and its applications in community, business, and industry; attention to desktop publishing as well as theories of writing, editing, and readability.

ENG 558. Writing Across the Curriculum in Theory and Practice (3) Analysis of the writing-across-the-curriculum movement including the theories of teaching, learning, and composing that inform it.

ENG 559. Pedagogies of Reading and Writing (3) Introduction to current topics in literacy pedagogy and their influences (e.g., feminism, literary theories, electronic technologies, social construction), with emphasis on theory in practice.

ENG 560. Topics in British Literature (3) Study of a period, theme, movement, major author, or genre in British literature. May be repeated for credit under a different subtitle.

ENG 561. Topics in American Literature (3) Study of a period, theme, movement, major author, or genre in American literature. May be repeated for credit under a different subtitle.

ENG 563. Topics in World Literature (3) Study of major traditions in world literature. Topics may include European literature or Third World literature. May be repeated for credit under a different subtitle.

ENG 572. Topics in Literary Criticism (3) Study of a topic in literary criticism. Topics vary; typical offerings could include the work of one or more theorists or theories of literary criticism. May be repeated for credit under a different subtitle.

ENG 580. Studies in Literature (3) Intensive examination of a special area of literary study. May be repeated for credit under a different subtitle.

ENG 591. Directed Independent Study (3) Students must secure permission of the graduate coordinator. May be taken once. May not be taken concurrently with ENG 599 or used for thesis research.

ENG 597. Thesis Writing Workshop (3) English majors only or consent of instructor. Prerequisite: Completion of 24 hours of M.A. coursework. Workshop focuses on specific issues in thesis writing. Students participate in writing groups through each phase of the writing process (bibliography, prospectus, drafting, revision, format, oral defense). May not be repeated for credit.

ENG 598. Internship in Applied English Studies (1-3) Prerequisite: Nine hours of graduate course credit for M.A. in English and permission of instructor. Supervised professional experience in an area of English studies including but not limited to editing, publishing, writing, writing instruction and film production. Specific goals and assignments to be set and evaluated by instructor.

ENG 599. Thesis (1–3)

MASTER OF SCIENCE IN GEOLOGY

The Department of Earth Sciences offers a program of study leading to the Master of Science degree in geology. The program provides advanced research and educational opportunities in the geological sciences and prepares students for solving contemporary problems in geology. Our faculty are prepared to supervise work in the following areas: marine and coastal geology; oceanography; geochemistry and geophysics; stratigraphy and basin analysis; environmental and resource geology; hydrogeology; geomorphology; mineralogy and petrology; paleontology and paleoecology; and structural geology and tectonics. The program includes both a thesis and non-thesis option, both of which provide a foundation for employment in the environmental fields, mineral and energy industries, and government agencies. In addition, the thesis option prepares students for advanced study leading to the doctoral degree while the non-thesis option prepares students for professional licensure in geology.

Admission Requirements

Applicants seeking admission to the graduate program in geology are required to submit the following to the Graduate School:

1. An application for graduate admission; including the statement of interest and degree option form.
2. Official transcripts of all college work (undergraduate and graduate)
3. Official scores on the Graduate Record Examination (verbal, quantitative, analytical writing)
4. Three recommendations by individuals in professionally relevant fields

Students seeking admission to the graduate program in geology must hold a bachelor's degree from an accredited college or university in this country or its equivalent in a foreign institution based on a four-year program, have a strong overall academic record with a "B" average on the basic courses prerequisite to geology, and satisfactory scores on the Graduate Record Examination. We accept students to our program who hold bachelor's degrees in any of the biological, earth, physical, or mathematical sciences. All students must have completed two semesters each of chemistry, physics, and calculus. Upon entrance into the master's program, the student's advisor may identify deficiencies and recommend remedies. All deficiencies must be removed before a student is accepted as a candidate for the degree.

Degree Requirements

Option 1 - Thesis

1. The program requires at least 30 semester hours of graduate credit, with a maximum of six credit hours for the thesis, three credit hours for seminars, and six credit hours of directed independent study (GLY 591). Each student must complete GLY 501 and GLY 502.
2. A maximum of six semester hours of graduate credit may be transferred from another accredited institution. Grades earned on transfer work must be equivalent to "B" or better. A minimum of 24 semester hours of graduate courses must be completed at UNCW including both course work and thesis. At least 18 semester hours must be completed in geology.
3. Each student must successfully complete a comprehensive oral examination prior to registering for thesis hours.
4. Each student must complete an approved course of study including an approved thesis prospectus within five years of the date of first registration for graduate study.
5. Each student must present and defend a thesis, based on original research, acceptable to the committee, prior to graduation. The thesis defense is open to the public.

Option 2 - Non-Thesis

1. The program requires at least 36 semester hours of graduate credit, including a maximum of three credits for internship or final project, three credit hours for seminars, and six credit hours of directed studies.

2. A maximum of six semester hours of graduate credit may be transferred from another accredited institution. Grades earned on transfer work must be equivalent to "B" or better. A minimum of 30 semester hours of graduate courses must be completed at UNCW including course work, internship, and final project. At least 27 semester hours must be completed in the department.
3. Each student must complete the following core curriculum: GLY 501, GLY 502, GLY 503, GLY 525, GLY 526, GLY 565, GGY 522, GGY 524, and GLY 597 or GLY 598.
4. Each student will take a written comprehensive examination after the successful completion of all required core coursework with the exception of GLY 597 and GLY 598.
5. Each student must complete either GLY 597 or GLY 598, and prepare and present a scholarly paper/report acceptable to the committee, prior to graduation. A final seminar is required.

GRADUATE PROGRAM IN GEOLOGY
Course Descriptions

GLY 501. Research Methods in Geology (2) Scientific proposal preparation, experimental design, scientific ethics, library use, safety, project management, data analysis, quality assurance and computer applications. One lecture and two laboratory hours per week.

GLY 502. Technical Communication in Geology (2) Scientific manuscript preparation and communication techniques: writing techniques, manuscript format, abstracts, oral and poster presentations. One lecture and two laboratory hours per week.

GLY 503. Advanced Field Methods (4) A survey of geotechnical field techniques applicable to structural geology, geophysics, hydrology, map interpretation, rock, soil and sediment description, engineering and economic geology. Two lecture and four laboratory hours per week. Required field trips.

GLY 510. Sedimentary Environments (3) Prerequisite: Petrology, stratigraphy, field camp. Survey of ancient sedimentary environments with an evaluation of the criteria used in their recognition in the rock record. Specific ancient sedimentary sequences are examined and compared to their modern counterparts. Field trips.

GLY 511. Clastic Petrology (3) Prerequisite: Optical mineralogy. Classification and description of sandstones and mudrocks and evaluation of their diagenesis. Application of principles to economic deposits. Laboratory exercises concentrate on microscopic and X–ray techniques of analysis. Two lecture and three laboratory hours per week. Field trips.

GLY 512. Carbonate Petrology (3) Prerequisite: Optical mineralogy or permission of instructor. An examination of sedimentary, igneous, and metamorphic carbonate rocks with emphasis on observation, description and interpretation. Plus an in depth look into how carbonate petrology is applied in the exploration and exploitation of natural resources including hydrocarbons, base metals, precious metals and industrial minerals. Two lecture and three laboratory hours per week.

GLY 513. Advanced Igneous Petrology (3) Prerequisites: Optical mineralogy, petrology, structural geology, or permission of instructor. Principles and methodology underlying the physical and chemical processes affecting the genesis of igneous rocks in various tectonic settings. Topics include the application of thermodynamics, chemographic relationships, and phase equilibrium to the differentiation of magmas and the crystallization of igneous minerals, and geothermobarometric and geochronologic investigation of igneous rocks. Two lecture hours and three laboratory hours per week. Field Trip(s).

GLY 514. Advanced Metamorphic Petrology (3) Prerequisites: Optical mineralogy, petrology, structural geology, or permission of instructor. Principles and methodology underlying the study of metamorphism and metamorphic facies in varying rock compositions, and petrotectonic settings. Topics include metamorphic phase equilibria and diagrams, geothermobarometry and P-T—time paths, metamorphic mineral crystallization and recrystallization, and textural relationships in metamorphic rocks having variable protoliths and histories. Two lecture and three laboratory hours per week. Field Trip(s).

GLY 515. Methods of Sedimentology (3) Prerequisite: Petrology. A survey of the parameters of sedimentation. Emphasis on the processes involved in the formation of sedimentary rocks, including their origin, transport, deposition and lithification of rock–forming minerals. Techniques of physical and chemical analyses of sediments are stressed. One lecture and six laboratory hours per week. Field trips.

GLY 520. Global Climate Change (3) Preqrequisites: General chemistry, college physics, and calculus with analytic geometry. Analysis of natural and anthropogenic global climate change. Historical and geological records of climate including sediment, tree ring, and ice core analysis. Physics and chemistry of climate including Earth's energy balance, global carbon cycle, climate modeling, atmospheric composition and dynamics.

GLY 525. Engineering Geology (3) Prerequisite: Consent of instructor. Properties, uses, and engineering significance of solid earth materials and water. Principles of stress and strain and related material responses. Methods, techniques, and instrumentation of engineering geologic investigations. Three lecture hours per week.

GLY 526. Geohydrology (4) Prerequisites: Two semesters of college calculus and petrology. Geology of ground waters and related aspects of surface waters. Methods of groundwater resource evaluation, protection, exploitation, and contaminant remediation. Three lecture and two laboratory hours per week.

GLY 531. Micropaleontology (3) Prerequisite: Invertebrate paleontology or consent of instructor. Paleobiology and geological history of microorganisms, emphasizing the classification and systematics of major microfossil groups. Two lecture and three laboratory hours per week. Field trips.

GLY 533. Paleoecology (3) Prerequisite: Invertebrate paleontology or consent of instructor. Principles of ecological faunal analysis as primarily applied to the marine fossil record. Emphasizes the integration of form and function, taphonomy, and community development through time, and sedimentology/stratigraphy as a synthetic approach to paleoenvironmental, paleobiological and evolutionary analyses. Applications to biostratigraphy are considered. Field trips.

GLY 535. Stratigraphic Paleontology (3) Prerequisite: Invertebrate paleontology, stratigraphy, or consent of instructor. Analysis of the historical, geological and biological basis of biostratigraphy emphasizing the application of biostratigraphic principles and techniques in the development of high-resolution relative time scales. Three lecture hours per week. Field trips.

GLY 540. Regional Geology of North America (3) Prerequisites: Structural geology, stratigraphy. Survey of the rocks, structures, natural resources, and tectonic histories of different regions of North America, such as the Precambrian shield, Appalachians, and Cordillera. Syntheses of theories of orogenesis. Three lecture hours per week.

GLY 541. Advanced Structural Geology (3) Prerequisite: Structural geology. Origin and analysis of earth structures. Solution of advanced structural problems involving stress, strain, rheology, folding, and fracturing of rocks. Rock mechanics, finite strain, and fabric analysis of deformed rocks.

Review of techniques. Directed field or lab problems and examples from literature. Two lecture and two laboratory hours per week.

GLY 543. Tectonics (3) Prerequisites: Structural geology, stratigraphy, petrology. Examination of current ideas and their development as global tectonic theories. Plate tectonic controls on orogeny, orogenic belts, magmatism, sedimentation, and metallogeny of major geologic regions of North America and other areas of the world. Three lecture hours per week.

GLY 550. Marine Geology (3) Prerequisite: Consent of instructor. Topography, sediments, structure and geologic history of the marine and estuarine environment. Two lecture and three laboratory hours per week. Field trips.

GLY 551. Seafloor Mapping (3) Prerequisite: Permission of instructor. A survey of different methods used to map the seafloor including satellite altimetry, multibeam and sidescan sonar swathmapping. Operation of instruments, survey strategies and techniques to process and interpret data will be explored. Shipboard fieldtrip. Two lecture and three laboratory hours per week.

GLY 552. Coastal Sedimentary Environments (4) Prerequisite: Consent of instructor. Sedimentary processes and environments of the world's coastal systems. Emphasis on river deltas, estuaries, bays, salt marshes, barrier islands and associated inlets. Ice–bound as well as rocky coastlines also are examined. Three lecture and three laboratory hours per week. Field trip.

GLY 555. Coastal Sediment Dynamics (3) Prerequisites: One year of calculus or physics or consent of the instructor. Theory and application of models used to quantify sediment movement and deposition in the coastal environment. Three lecture hours per week. Field trips.

GLY 558. Introduction to Coastal Management (4) Interdisciplinary study of human impacts on coastal environments and organisms. Topics include the physical and biotic setting of worldwide coastal regions, principles of coastal management, and analysis of potential solutions to coastal problems. Three lecture and three laboratory hours each week.

GLY 560. Integrative Stratigraphy (3) Prerequisites: Invertebrate paleontology, stratigraphy, petrology. Stratigraphic analysis of the geologic history of North America and parts of other continents. Emphasis on interpreting lithologic assemblages and stratigraphic relations in terms of modern tectonic–depositional models. Two lecture and three laboratory hours per week.

GLY 561. Coastal Plains Geology (3) Prerequisites: Invertebrate paleontology, stratigraphy, petrology. Origin and development of Gulf and Atlantic Coastal Plains with emphasis on stratigraphy, structure, geomorphology and tectonic history. Field trips. Three lecture hours per week.

GLY 565. Introduction to Geophysics (3) Prerequisite: Consent of instructor. Integrated application of geophysical methods to solve environmental and geologic problems. Includes discussion of reflection/refraction seismology, gravity, magnetics, electrical resistivity, ground penetrating radar, and geophysical well logging.

GLY 572. Introduction to Geochemistry (3) Prerequisites: Two semesters of college calculus; mineralogy or inorganic chemistry; or permission of instructor. Investigation of the abundance and distribution of chemical elements in the Earth's crust, mantle, atmosphere, hydrosphere, and biosphere. Introduction to thermodynamics, phase and mineral equilibrium, stable and radiogenic isotopes, and geochronology. Emphasizes the application of geochemical processes to solving geologic and environment problems, with selected examples from field and laboratory studies.

GLY 591. Directed Independent Study (1–3)

GLY 592. Topics in Geology (1–4) Prerequisite: Consent of instructor. Advanced special topics in geology through lectures, seminars, and laboratory or field experience.

GLY 595. Seminar (1) Prerequisite: Consent of instructor. Research and discussion of selected topics in earth sciences. Oral presentation at a departmental seminar and attendance at selected university seminars required.

GLY 597. Final Project in Geology (3) Permission of Instructor. Focused study of a research topic in the practical application of geology. Topics are selected by the student with appropriate faculty and graduate coordinator approval. Students work with a faculty committee. Written analysis and oral presentation of the project is required.

GLY 598. Internship (3) Prerequisite: Permission of instructor. Participation in field experience with an organization involved in the practice of geology. Students work with a licensed professional geologist focusing on the linkage between course work and practical application. Students complete a final report based on their activities. Final presentation required.

GLY 599. Thesis (1–6)

Course Descriptions for Geography

GGY 522. (422) Remote Sensing in Environmental Analysis (3) Prerequisite: GGY 130 or 205, or GLY 101, or consent of instructor. Use and interpretation of aerial photography and other remote sensing techniques in environmental analysis. The course emphasizes problem identification, digital image analysis, and interpretation of images through laboratory exercises.

GGY 524. Geographic Information Systems (3) Permission of instructor. Introduction to the science and technology of Geographic Information Systems (GIS) including data collection, spatial data structures, spatial analysis theory and techniques, and end-user map products. Instruction will be provided through lectures, demonstrations, and lab exercises. Two lecture and three laboratory hours each week.

GGY 552. Historical/Cultural Geography (3) Prerequisite: Permission of instructor. Study of the evolution of natural environments and cultural landscapes; spatial diffusion; settlement patterns; and the material culture including vernacular architecture. Focus will be on North America, with consideration of European antecedents. A seminar type course in which students are responsible for an intensive research project.

GGY 578. (478) Historic Preservation Planning (3) An applied research course which deals with the procedures employed by federal, state and local agencies in locating, recording, restoring and preserving American architectural resources and material cultural heritage. Subjects examined include survey, documentation, and planning; historic districts; adaptive use; funding; legislation; and organizational roles.

GGY 592. Special Topics in Geography (1-4) Prerequisite: Consent of instructor. Advanced special topics in geography through lecture, seminar, and laboratory or field experience. More than one topic may be taken for credit.

MASTER OF ARTS IN HISTORY

The Department of History offers a program of study leading to the Master of Arts degree in history. Specific goals of the program are: (1) to provide advanced research and educational opportunities in the study of history; (2) to prepare historians by training them in the latest research techniques, providing them with a knowledge of the most current research on historical problems; and (3) to direct students in historical research using historical documents and archives.

Admission Requirements

1. Applicants are required to submit the following to the Graduate School:
2. An application for graduate admission.
3. Official transcripts of all college work (undergraduate and graduate).
4. Official scores on the Graduate Record Examination.
5. Three recommendations by individuals in professionally relevant fields; at least two must be from academics.
6. Research paper or suitable equivalent.

Applications for non-degree status will not be accepted.

The minimum requirements for admission to the graduate program in history include: satisfactory scores on the Graduate Record Examination (verbal, quantitative and analytical), a bachelor's degree from an accredited college or university or its equivalent in a foreign institution based on a four–year program, and an overall academic record with a "B" average or better in the basic courses prerequisite to the area of proposed graduate study. The deadline for fall admission is May 1 (March 1 for full consideration for financial aid and assistantships); for spring admission the deadline is November 1.

Degree Requirements

1. The program requires a minimum of 30 semester hours of graduate study, 24 of which must be in history. A maximum of six semester hours of credit may be transferred from another accredited institution. Grades on transfer work must be equivalent to "B" or better. At least 24 hours of graduate study must be completed in residence.
2. All students must complete a minimum of 24 semester hours of course work. Students in US., European and global must complete, in addition, six hours of thesis; public history students three hours of internship and three hours of thesis. At least 18 hours of course work must be completed in courses open only to graduate students; for public history students at least 15 hours. Crosslisted courses will have additional requirements and different grading for graduate students
3. Students must complete HST 500, 12 hours in the area of concentration and nine hours of electives. Six hours beyond HST 500 must be in graduate-level seminars. One graduate seminar must be in the area of concentration. No more than six hours of HST 591 may be counted toward the degree.
4. Each student must successfully complete a written comprehensive examination that will be administered no earlier than during the final semester of enrollment in course work, and no later than the semester following the completion of course work.
5. Each student in the U.S., European and Global areas will complete six hours of Thesis (HST 599), and defend the thesis to the satisfaction of the thesis committee, prior to graduation. Each student in public history will complete three hours of Internship in Public History (HST 598) and three hours (or more) of Thesis (HST 599) and present either a disciplinary content thesis, an original contribution to the literature of public history, or a work of interpretive scholarship acceptable to the thesis committee prior to graduation.
6. Students must pass a competency examination demonstrating satisfactory reading knowledge of a foreign language.
7. The program shall be completed within five years of the date of first registration for graduate study.

GRADUATE PROGRAM IN HISTORY
Course Descriptions

HST 500 is a prerequisite or co-requisite for all classes.

HST 500. Historiography and Methodology (3) Introduction to problems of historical research through examination of major historical works and current techniques of research, evaluation of sources, development of bibliography, and quantitative historical methods including the role of the computer in historical research. This course is open only to graduate students.

HST 518. (440) Seminar: U.S. Social History (3) Intensive study of selected topics in U.S. social history. Examples of topics: African–Americans, immigrants, social movements, education, work and leisure, sexuality. May be repeated under a different subtitle. May not be applied toward fulfillment of graduate seminar requirement.

HST 520. U.S. Colloquium (3) Readings and discussion of bibliographies, interpretations, and research trends on a theme offered in American history. This course is open only to graduate students. May be repeated one time for credit.

HST 522. U.S. Seminar (3) Research in the bibliography of specialized topics and use of primary sources to write an original research paper on an aspect of American history. This course is open only to graduate students. May be repeated under a different subtitle.

HST 524. Major Interpretations in American History (3) A historiographic survey of influential interpretations of American history as they relate to specific topics and periods. This course is open only to graduate students.

HST 525. (442) Seminar: U.S. Economic History (3) Intensive study of significant themes or events in U.S. economic history from the colonial period to the present. Examples of topics: economy of Colonial America, 19th–century labor movements, economy of the Ante-bellum South, agricultural history. May be repeated under a different subtitle. May not be applied toward fulfillment of graduate seminar requirement.

HST 526. (444) Seminar: U.S. Political History (3) Intensive study of selected facets of political theory, behavior, movements, and institutions, and how political power has been used to influence the development of society. Examples of topics: New Deal politics, third–party movements, U.S. Constitution. May be repeated under a different subtitle. May not be applied toward fulfillment of graduate seminar requirement.

HST 527. (446) Seminar: U.S. Diplomatic History (3) Intensive examination of fundamental principles, assumptions, and objectives in the conduct of U.S. foreign policy, and of how Americans have viewed their place in the international order at various moments in their history. Examples of topics: the diplomacy of World War II, the Cold War, arms control and disarmament. May be repeated under a different subtitle. May not be applied toward fulfillment of graduate seminar requirement.

HST 528. (448) Seminar: U.S. National Security History (3) Intensive examination of major themes and events in the evolution of U.S. national security and defense policy, the uses of national power, and the role of military affairs from the colonial period to the present. Examples of topics: the Vietnam War, the use of air power, U.S. imperialism. May be repeated under a different subtitle. May not be applied toward fulfillment of graduate seminar requirement.

HST 529. (450) Seminar: U.S. Intellectual History (3) Intensive examination of the role of ideas in American history. Examples of topics: radicalism, the Enlightenment, myth in American history,

and ideas about democracy, ethnicity, equality, religion, gender. May be repeated under a different subtitle. May not be applied toward fulfillment of graduate seminar requirement.

HST 531. (454) Seminar: U.S. Regional History (3) Intensive examination of the economic, social, and political history of a specific region of the United States. May be repeated under a different subtitle. May not be applied toward fulfillment of graduate seminar requirement.

HST 533. (456) Seminar: U.S. Environmental History (3) Prerequisite: HST 201-202, 290 or consent of the instructor. Intensive study of selected topics in U.S. environmental history. Examples of topics: nature and culture, the cult of the wilderness, conservation and preservation, resources and regions, gender and nature, the environmental movement. May be repeated under a different subtitle. May not be applied toward fulfillment of graduate seminar requirement.

HST 540. European Colloquium (3) Readings and discussion of major research trends and schools of interpretation in selected themes in European history. This course is open only to graduate students. May be repeated one time for credit.

HST 542. European Seminar (3) Research in the bibliography of specialized topics and use of primary sources to write an original research paper on an aspect of European history. This course is open only to graduate students. May be repeated under a different subtitle.

HST 548. (408) Seminar: Medieval Europe (3) Research–oriented exploration of major themes and issues in history of Medieval Europe (500–1500). May not be applied toward fulfillment of graduate seminar requirement.

HST 552. (412) Seminar: Renaissance and Reformation Europe (3) Research–oriented exploration of major themes and issues in the history of Renaissance and Reformation Europe (1350–1618). May not be applied toward fulfillment of graduate seminar requirement.

HST 554. (414) Seminar: Early Modern Europe (3) Research–oriented exploration of major themes and issues in the history of Early Modern Europe (1618–1789). May not be applied toward fulfillment of graduate seminar requirement.

HST 556. (416) Seminar: Nineteenth–Century Europe (3) Research–oriented exploration of major themes and issues in the history of Europe from the French Revolution to the First World War. May not be applied toward fulfillment of graduate seminar requirement.

HST 558. (418) Seminar: Twentieth–Century Europe (3) Research–oriented exploration of major themes and issues in the history of Europe since 1914. May not be applied toward fulfillment of graduate seminar requirement.

HST 560. Global Colloquium (3) Readings and discussion of bibliographies, interpretations, and research trends on a theme or period in global history. This course is open only to graduate students. May be repeated one time for credit.

HST 562. Global Seminar (3) Research in the bibliography of specialized topics and use of primary sources to write an original research paper on an aspect of global history. This course is open only to graduate students. May be repeated under a different subtitle.

HST 564. Modernization and Revolution in the Non–Western World (3) Examination of industrialization, imperialism, nationalism, and other forces that have revolutionized traditional society in the non–Western world. This course is open only to graduate students.

HST 570. (470) Introduction to Public History (3) Broad focus on research, scholarship, and professional practice in historical documentation, administration, collections management, preservation, exhibition and interpretation, education, policy applications, and media. Field trips, guest speakers, and a class project based on primary research introduce students to career opportunities and model the collaborative process in public history.

HST 573. Public History Seminar (3) Research in the bibliography of specialized topics and use of primary sources to write an original research paper or complete an original interpretative project on an aspect of public history. This course is open only to graduate students. May be repeated under a different subtitle.

HST 577. (477) Historic Preservation in the U.S. (3) This applied research class provides an overview of the history, theory, and practices of historic preservation. It addresses the history of the built American environment and how scholars analyze buildings and landscapes as historical evidence. Students visit historic structures and conduct both fieldwork and archival research.

HST 580. (480) Topics in Public History (3) Intensive study of selected themes in public history. Examples of topics: history and memory, interpretation of landscape, interpretation of material culture, and business history. May be repeated under a different subtitle.

HST 581. (481) Topics in African History (3) Intensive study of a selected theme in African history. Examples of topics: slavery, the slave trade and its abolition, pre–colonial Africa, colonial and post–colonial Africa, oral history in Africa. May be repeated under a different subtitle.

HST 583. (483) Topics in Middle Eastern History (3) Intensive study of a selected theme in Middle Eastern history. Examples of topics: early Islamic conquests, the Ottoman Empire, the Arab–Israeli conflict. May be repeated under a different subtitle.

HST 585. (485) Topics in Latin American History (3) Intensive study of a selected theme in Latin American history. Examples of topics: pre–Columbian civilizations. May be repeated under a different subtitle.

HST 586. (496) Topics in the History of Science and Technology (3) Intensive study of a selected theme in the History of Science and Technology. Examples of topics include: "Positivism," "The Scientific Revolution," "Occult Studies and the Renaissance," "The Industrial Revolution." May be repeated under a different subtitle.

HST 587. (487) Topics in Global History (3) Intensive study of a selected theme in global history. Examples of topics: colonialism, imperialism, industrialization, slavery, revolutionary movements. May be repeated under a different subtitle.

HST 590. Comparative Historical Studies (3) Comparison of developments in different eras or places in order to determine unique or common historical themes. This course is open only to graduate students. May be repeated one time for credit

HST 591. Directed Independent Study (1-6) May take up to six credit hours; see the graduate history coordinator for details.

HST 593. Problems in History (3) Investigation of selected problems in European, American, and non-Western History through discussions, development of bibliographies, or research papers. This course is open only to graduate students. May be repeated one time for credit.

HST 595. (495) Special Topics in History (3) Research-oriented exploration of a special topic not regularly covered in other courses. May not be applied toward fulfillment of graduate seminar requirement.

HST 596. Seminar: Topics in History (3) Advanced research on specialized topics using, where possible, primary sources. This course is open only to graduate students. May be repeated one time for credit.

HST 597. (497) Topics in Asian History (3) Intensive study of selected themes and events in Asian history not regularly covered in other courses. Examples of topics include: Chinese Revolutions, Meiji Japan, Gandhian thought, and nationalist movements. May be repeated under a different subtitle.

HST 598. Internship in Public History (3) Prerequisite: HST 570 and permission of the instructor. Supervised experience with credentialed professional in public history or technical field, combined with directed reading in literature of that field. Final product must meet accepted standards of historical scholarship and professional practice as defined by faculty and supervising professional.

HST 599. Thesis (1–6) This course is open only to graduate students.

MASTER OF ARTS IN LIBERAL STUDIES

The College of Arts and Sciences, School of Nursing, Watson School of Education and the Cameron School of Business offer a program that leads to the Master of Arts in Liberal Studies (MALS). This program is for students who wish to design a personalized curriculum of interdisciplinary graduate study. Courses are selected that will expand their interests and deepen their understanding of themselves, their society and the environment. This program reflects an older, cultural tradition of scholarship, which liberally educates the whole person, providing breadth and depth, but not necessarily applying directly to a career or vocation. The major objective of this program is to offer highly motivated, intellectually prepared adult learners an opportunity to explore the questions and issues that are important to them and society.

Admission Requirements

Applicants seeking admission to the graduate program in liberal studies are required to submit the following to the Graduate School:

1. An application for graduate admission
2. Official transcripts of all college work (undergraduate and graduate)
3. Three recommendations that address the student's chances of success in a graduate Liberal Studies program
4. A writing sample in the form of an essay explaining how the graduate liberal arts degree can assist the candidate in meeting his or her personal goals.

Students seeking admission to the Master of Arts in Liberal Studies program must hold a bachelor's degree with an academic record of a "B" average or better in the undergraduate major from an accredited college or university in this country or its equivalent in a foreign institution based on a four-year program. The admission procedure also includes an interview with the graduate coordinator of the program and a representative from the advisory committee.

Degree requirements

1. The program requires a minimum of 30 semester hours of graduate study.
2. No more than six hours may be taken from cross-listed 400/500 courses.
3. Students must maintain a "B" average in all graduate courses taken.
4. No more than six semester hours of credit may be transferred from another accredited institution. Grades earned on transfer work must be equivalent to "B" or better. A minimum of 24 hours of graduate study must be completed in residence.
5. A final project (GLS 598) of three credit hours is required of all students who have successfully completed 27 hours of course work. The project provides students with the opportunity to explore particular areas of study in greater depth under the close supervision of a faculty member. The final project may take the form of scholarly research or a creative work, but in all cases a written analysis is required to meet the degree requirements. Students will present their project to a forum of faculty and students.
6. Students are expected to complete all course work within five years after enrollment. Students wishing to withdraw from the MALS program prior to the completion of thirty hours who have completed a minimum of fifteen hours in residence towards the MALS degree may be eligible for a Certificate of Study in Liberal Studies. Students must consult the director to apply for the certificate.

Required courses: Two courses are required for all students:

GLS 502	Contemporary Issues in Liberal Studies	(3)
GLS 598	Final Project in Liberal Studies	(3)

MALS courses fall into five broad thematic areas: 1) social concerns and cultural systems; 2) environment, science, and society; 3) arts and literature and society; 4) gerontology; and 5) Hispanic studies.

Elective Courses

At least 15 of the 24 elective hours must be graduate level liberal studies (MALS) courses, with the exception of students pursuing a concentration in gerontology or Hispanic studies. Studies pursuing a concentration in gerontology must take GRN 501, Aging in Society; GRN 523, Biology of Aging; PSY 524, Psychology of Aging; and six elective hours of gerontology. Students pursuing a concentration in Hispanic Studies must take a total of 18 hours distributed as follows: nine hours of core classics in Hispanic studies and nine hours of electives in Hispanic studies (as described in the Post-baccalaureate certificate program in Hispanic studies section of this catalogue).

GRADUATE PROGRAM IN LIBERAL STUDIES
Course Descriptions

GLS 502. Contemporary Issues in Liberal Studies (3) A review of critical issues in liberal studies that may be influencing disciplinary methodology, discourse or research techniques. Emphasis on forms of oral and written communication, computer presentations and library research techniques.

GLS 510. Religion and Sex (3) Through an examination of the major world religions' views on sex, procreation, marriage, abstinence, masturbation, incest, and sexual orientation as expressed in their scriptures, exegesis, and practice, this course explores the close connections between various conceptions of the sacred and their impact on this biological activity.

GLS 511. The Social Organization of Cruelty (3) This course examines the origins and organization of cruelty (slavery, torture, genocide, child abuse, the treatment of "inmates" in nursing homes and mental hospitals) with the aims of 1) developing a general theory of cruelty and 2) better understanding cruelty as an ongoing social achievement.

GLS 512. The Renaissance of Scottish Culture (3) The current phenomenon of Scottish cultural rejuvenation and preeminence (with Glasgow its City on a Hill) is seen through the lens of recent developments in Scottish literature as necessarily connected with analogous developments in economics, politics, and the arts, all interacting with each other to produce the renaissance.

GLS 513. Transitions from Communism (3) An interdisciplinary approach to the problems of transition in four regions: Eastern Europe, Russia, Central Asia, and China. After an examination of the historical, geographical, and cultural foundations of current issues, the course focuses on the prospects for democracy and civil society.

GLS 514. Post-Modern Childhood (3) Interdisciplinary exploration of contemporary childhood. Popular media, scholarly sources, and a variety of qualitative methods will be used to analyze the social worlds of children and the social construction of childhood in postmodern and increasingly global consumer culture.

GLS 515. Religion, Women, Gender in Early Modern Europe: Texts and Contexts (3) A study of the religious and cultural context of early modern Europe through the lens of texts by women and about women and gender, including the newly revived *querelle des femmes,* creative religious writing (poetry, plays, devotional works, stories, letters and diaries), and theological treatises on the nature of "woman."

GLS 516. Utopias and Dystopias: Literary Visions, Past, Present, and Future (3) Discussion of fiction by British and American writers such as Atwood, Wiesel, Lessing, and Burgess, set in a timeless space, that imagines ideal societies and societies gone awry. Consideration of generic traits of this fiction.

GLS 517. Affirmative Action and Social Justice (3) Introduction, through discussion, debate and dialogue, to the philosophy of racial justice. Topics include equality and the Constitution, slavery and segregation, the philosophy of civil rights, affirmative action and theories of social justice, and racial healing.

GLS 518. Puzzles of Society (3) An examination of different interdisciplinary perspectives that undergird the variety of ways both laymen and social professionals attempt to make practical sense of social life. Also, emphasis is placed on matching these perspectives with some of the tools or skills that are available to address everyday social problems.

GLS 519. Poverty, Social Policy, and the American Welfare State (3) A seminar considering America's struggle against poverty and related social problems. Examination of social policy and programs, the changing character of poverty over the past century, the influence of reform movements, and the future of the U.S. social welfare system.

GLS 520. Atheism and Unbelief (3) Examines the beliefs and assumptions of atheists by exploring an atheist's response to common theistic arguments, by surveying the historical and philosophical traditions of atheism, and by considering how atheists explain all those things deists need gods for, with special reference to the theories of Freud, Durkheim, Marx, Skinner, Harris, and Sperber.

GLS 521. Mass Media and Society (3) Examines the relationship between media, culture, and society, with a special emphasis on interdisciplinary perspectives. Focuses on the roles the mass media play in the production, reception, and representation of the news, race, class, gender and sexuality in contemporary society.

GLS 522. Shamanism (3) Cross-cultural study of shamanism. Topics include importance of cultural context, altered states of consciousness, balance with nature, and use of plants. Exploration of the shaman as healer, medium, and conduit of spiritual knowledge. Shamanism as a personal journey.

GLS 523. Interdisciplinary Perspectives on Popular Culture (3) Cross-cultural and semiotic analysis of popular forms of everyday life (food, fashion, fads, entertainment trends, television, movies, music, myths, stereotypes, and icons of mass-mediated consumer culture), with a special emphasis upon thinking and writing critically about popular culture by examining tacit assumptions about how the world works and our place in it as well as the role language plays in shaping reality.

GLS 524. The Contemporary American Workplace (3) Examines the contemporary American workplace from a number of disciplinary perspectives—economic, sociological, psychological, historical, philosophical, and literary—and considers such concerns as work and identity, ethics and the workplace, gender and ethnic discrimination, work as reality and myth, work and leisure, the workaholic syndrome, job satisfaction, management and labor relations, and education and the marketplace.

GLS 528. Cultural Images of America in the 60s (3) An interdisciplinary examination of the United States in the 1960s, with a focus upon such major political, social, and cultural developments as the anti-Vietnam war movement, the free speech movement, the civil rights movement, the women's movement, the sexual revolution, the Black Arts movement and the environmental movement as well as the evolution of a distinctive counterculture.

GLS 529. Cultural Images of America in the 50s (3) An interdisciplinary examination of the United States in the 1950s from a variety of socio-cultural perspectives, with a focus upon such topics as fashion, automotive design, food and kitchen technology, roadside architecture, suburban

development, consumerism, the nuclear family, the evolution of a distinctive youth culture, segregation, the "Red" scare, popular fads, and the popular media.

GLS 530. The Shaping of America: Cultural Landscapes and the American Sense of Place (3) Examination of the material cultural landscapes of America from geographical, historical, and aesthetic perspectives and how attachment to place has shaped the landscape. A study of the rich spatial tapestry of our nation's fields, towns, cities, architectural styles, railways, and roadscapes and how those patterns reflect five centuries of diverse ethnic and cultural evolution.

GLS 531. Science and Pseudoscience (3) Study of criteria for description and explanation in science and the use of those criteria to demarcate between scientific and pseudoscientific claims to knowledge. Evaluation of specific areas such as parapsychology, astrology, and alternative medicine. Consideration of psychological factors influencing people's tendency to accept unsupported beliefs.

GLS 532. Conservation and Culture (3) A discussion of both contemporary and historical links between conservation and human cultures, with a focus on wildlife and other natural resources. Includes topics such as the Dust Bowl, attitudes toward predators, the founding of the Hudson Bay company, Smokey the Bear, Rachel Carson and *Silent Spring*, and the conservation ethics of Muir, Pinchot, and Leopold.

GLS 533. The Environmental Crisis (3) An intensifying environmental crisis has arisen from local, national, and transborder encounters with water and air pollution, habitat destruction and species extinction, and possible global warming, all in the context of unprecedented population growth. This course is an America-centered, historically oriented examination of our environmental dilemmas and their possible solutions.

GLS 534. Culture Wars and the Origin of Difference (3) Intensive study of significant themes in the literature on the encounter of European peoples with the Third World. Interdisciplinary and anthropological readings focus on explanations for the origin of cultural differences, the dynamics of the colonial encounter, the contemporary clash of cultures, and multiculturalism.

GLS 535. The Historical Geography of Food (3) Examines the foodways of different cultural regions from prehistoric hunter/gatherers through Neolithic sedentary agriculture up to modern agri-business, including the diffusion of agricultural practices and products, famine's causes and effects, the decline of world fisheries, climatic and economic parameters of food production, and the role of foods in cultural practices and prohibitions.

GLS 560. Art in Social Science Perspective (3) Art both organizes and is organized by social interaction. This course examines this dialectical relationship between art and society, focusing upon the complex networks of social relationships among artists, critics, aestheticians, patrons, and institutions that powerfully influence the ways in which art is performed, exhibited, evaluated, and supported.

GLS 561. Theatre and Cinema (3) Aesthetic study of theatre and film and the relations between them. Examination of key texts in each medium, emphasizing rhetorical analyses of language, mise-en-scene, performance, cinematography, editing and other properties particular to dramatic art forms. Three seminar hours and two screening hours each week.

GLS 562. Our Cultural Heritage through Dance (3) This course provides an opportunity to experience and examine dance forms and cultures from around the world. These experiences will provide the focus and impetus for students to make connections to their lives, to show connections to the global studies curriculum, and to encourage future independent study by individual class members.

GLS 563. Comic Strips and Political Cartoons as Literature (3) A consideration of comic strips and cartoons as popular literature. Provides a brief history of each genre in America and Britain and then focuses on recent examples. Studies such contemporary masters of political cartooning as Jeff MacNelly and Pat Oliphant and such comic strips *as Calvin and Hobbes, Pogo, Cathy*, and *Dilbert*.

GLS 564. Autobiography from the Margins: Race, Gender, Ethnicity, and Age in America (3) Study of American autobiography as genre and of race, gender, ethnicity, and age as they influence the texts and our reading of them. Includes such authors as Richard Wright, Jill Ker Conway, Maxine Hong Kingston, and Philip Roth.

GLS 566. Documentary Film: Moving Images (3) The Documentary Tradition. One documentary film will be shown and discussed each week so that students will develop an awareness of how these films, both classics and current-day documentaries, were put together. Narration, interview, historical photos, and footage as well as actual filming of action, people and scenes will be analyzed to see how a documentary story is told. The student will be able to see how various video and audio segments make up a documentary and will become a more critical viewer of documentaries.

GLS 567. Slums, Manors, and the American Dream (3) A discussion of the effects of rapid urbanization, greed, and the rationalization of immense wealth upon American writers from about 1890 to 1925. The course examines fiction, plays, muckraking journalism, and documentary film to understand how writers employ sensation, sentiment, melodrama, and realism to elicit responses from their readers.

GLS 568. Black Intellectual Tradition (3) An interdisciplinary study of the black intellectual tradition in the humanities, social sciences, and the fine arts that spans nearly two hundred years, two continents, and most of the academic disciplines with special emphases upon African intellectual heritage, African philosophical thought forms, Afro-American philosophy of religion, black education, the black social conscience, and Blacks in literature.

GLS 569. Sex and Social Change in the Early Twentieth-Century U.S. (3) An exploration of the construction of the American "New Woman" in fiction and drama written by both men and women. Topics include the influence of the suffrage movement, the introspection occasioned by new conceptions of sexuality, the aesthetics of protest literature, the effects of increased social freedom for women, the impact of women entering the work force, and especially new conceptions of "male" and "female."

GLS 570. Black Mountain School of North Carolina (3) Intensive study of the highly innovative and interdisciplinary Black Mountain School (1933-1956), its roots in European and American culture, and its remarkable legacy. Special emphasis upon poetry, the visual arts, and the performing arts and such leading figures as Charles Olson, Robert Duncan, Robert Motherwell, William de Kooning, John Cage, and Merce Cunningham.

GLS 591. Directed Independent Study (1-3) Students must secure permission of the graduate coordinator. May be taken once. May not be taken concurrently with GLS 598 or used for thesis research.

GLS 592. Special Topics in Liberal Studies (1-3) Exploration of a special topic in liberal studies not regularly covered in other courses. May be repeatable for a maximum of 18 hours under different titles for credit.

GLS 598. Final Project in Liberal Studies (3) Focused study of topic or question selected by student and approved by faculty advisor and director of MALS. Synthesizes or represents the student's interdisciplinary theme or concentration. Written analysis and oral presentation of project is required.

MASTER OF SCIENCE IN MARINE SCIENCE

The College of Arts and Sciences in conjunction with the Center for Marine Sciences oversees an interdisciplinary program of study leading to the Master of Science degree in marine science. The educational objectives of this degree program are 1) to provide a broad interdisciplinary understanding of marine science to students having strong undergraduate training in mathematics and the sciences; and 2) to develop skills that will enable these students to utilize this knowledge to solve complex marine environmental problems. These problem-solving skills will provide the foundation for future contributions by the graduates in marine-related industries, environmental management, teaching, research, and other marine-oriented careers. Students will also be prepared to undertake additional graduate study.

Admission Requirements

Applicants seeking admission to the graduate program in marine science are required to submit the following to the Graduate School:

1. An official application for graduate admission
2. Official transcripts of all college work (undergraduate and graduate)
3. Official scores on the Graduate Record Examination (verbal, quantitative, analytical writing)
4. Three recommendations by individuals in professionally relevant fields
5. Statement of research interests.

A bachelor's degree with a concentration in a natural science or mathematics from an accredited college or university in this country or its equivalent in a foreign institution based on a four year program is required for admission, along with a "B" average or better in the student's major. Undergraduate grades, GRE scores, recommendations and statements of research interest will be used in concert in making admission decisions.

Degree Requirements

1. The Master of Science in marine science will require a minimum of 30 semester hours of graduate study. These credits may come from the student's major area of study as well as graduate courses offered by other departments as approved by the student's advisory committee. The student's advisory committee should include a minimum of three faculty members from at least two departments.
2. The courses most appropriate for each student will be determined by the student's advisory committee, with the expectation that a student will usually take no more that 12 credit hours from those courses cross-listed as 400/500.
3. Transfer work must be equivalent to a "B" or better, and courses must be acceptable to the student's advisory committee. A minimum of 24 semester hours of graduate study must be completed in residence.
4. The student must successfully complete a written comprehensive examination based on their core courses, and an oral exam on their research area. Students must also submit a prospectus that includes a course plan, literature review and research proposal which is acceptable to the student's advisory committee.
5. Each student must complete a thesis, based on original research, acceptable to the student's advisory committee and to the Graduate School. Each student will present a public seminar on his or her research project. The seminar will be followed by an oral defense of the thesis, conducted by the student's advisory committee.
6. The program shall be completed within five years of the date of first registration for graduate study.

Required Courses

Core courses: Three of the following are required. All four may be taken, and should be taken by students planning on continuing in a Ph.D. program.

BIO 564	Biological Oceanography	(3)
CHM 575	Chemical Oceanography	(3)

GLY 550	Marine Geology	(3)
PHY 575	Physical Oceanography	(3)

Students are also required to take:

BIO, CHM OR GLY 501	Methods in Scientific Research	(2)
MSC 595	Graduate Seminar	(1)
BIO, CHM, GLY OR MAT 599	Thesis	(3-6)

After obtaining approval from their advisory committees, students may select courses from the sciences, mathematics, statistics, and other areas as appropriate. For course descriptions, please refer to individual departmental listings.

GRADUATE COURSES IN MARINE SCIENCE

PHY 575. Physical Oceanography (3) Prerequisite: Permission of instructor. An introduction to the descriptive and dynamical features of ocean circulation. Topics include: the physical properties of seawater; oceanic heat budget; dynamics of ocean currents; descriptive oceanography; waves and tides.

MSC 526. Cruise or Field Sampling (1-3) Prerequisite: Permission of program director. Cruise and/or field sampling not covered by other courses. Participation in the planning and sampling phases of major marine or environmental research programs.

GLY 550. Marine Geology (3) Prerequisite: Consent of instructor. Topography, sediments, structure and geologic history of the marine and estuarine environment. Three lecture and three laboratory hours per week. Field trips.

BIO 564. Biological Oceanography (3) Prerequisite: Permission of instructor. Discussion of the recent oceanographic literature concerning nutrient cycling, distribution and regulation of oceanic productivity, and advances in methodologies used to study oceanic processes and controlling factors. Three lecture hours per week.

CHM 575. Chemical Oceanography (3) Prerequisite: General chemistry. An oceanography course is recommended. Sources, distribution, forms of occurrence, and reactions of chemical species in seawater. Chemistry of concentrated aqueous solutions. Patterns of global ocean circulation Air-sea and sediment-seawater interactions. Estuarine processes and reactions. Human impact on the oceans.

MSC 579. (CHM 579) Role of the Oceans in Human Health (3) Prerequisite: CHM 212, BIO 110, or consent of instructor. Discovery, structure, and biological activity of marine bioactive compounds, chemotaxonomy, pharmaceutical leads, marine biotoxins, structure, mode of action, regulation and monitoring, the producing organisms, how (biosynthesis) and why these compounds are made. Two lectures per week.

MSC 591. Directed Independent Study (1-3)

MSC 595. Graduate Seminar (1) Discussion by students, faculty and guest lecturers of research ideas and results. May be repeated one time for credit.

MASTER'S DEGREE PROGRAMS IN MATHEMATICS

The Department of Mathematics and Statistics offers programs of study leading to the Master of Arts or Master of Science degree in mathematics. The Master of Science program is designed to prepare students for careers in business, industry, or government as well as for further study in mathematics. Applications from the sciences, industry and management are stressed in course work from the areas of classical applied mathematics, operations research, statistics and computer science. The more traditional Master of Arts program is flexible enough to build a strong background in basic areas of both the pure and applied sides of mathematics. Thus it is the program of choice for those interested in secondary or community college teaching. Teachers in secondary schools who wish to obtain graduate level teacher certification should check with the graduate coordinator in the Watson School of Education to determine the current requirements for certification. The Master of Arts is also appropriate for those who intend to pursue the Ph.D. degree at another institution. The Master of Science has additional admissions prerequisites and required course work.

Admission Requirements

Applications for admission may be made at any time. Normally, applicants applying for fall admission should have all documentation submitted by March 15. However, those applying for teaching assistantships for fall admission should have all documentation submitted by February 15. Applicants are required to submit the following to the Graduate School:

1. An application for graduate admission.
2. Official transcripts of all college work (undergraduate and graduate).
3. Official scores on the Graduate Record Examination (GRE) aptitude test. Applicants are encouraged to take the GRE Advanced Test in mathematics as well. Scores more than five years old will not be accepted. In cases where the opportunity to take the GRE may be limited (such as in certain foreign countries) the applicant may request a waiver or modification of this requirement. Such requests will be considered by the department on their individual merit.
4. Three recommendations from individuals in professionally relevant fields.

Each applicant also must:

5. Have a strong overall academic record and have passed, with a "B" or better average, the following undergraduate mathematics courses or their equivalent: a standard introductory calculus sequence including multivariate calculus, a course in linear algebra, and at least 15 additional semester hours of mathematics or statistics courses beyond the level of calculus.

In addition, an applicant choosing the Master of Science must:

6. Have had an undergraduate course in calculus-based statistics and have programming experience using a modern structured language.

Admissions decisions are based upon the examination of several factors, and where other indicators of success warrant, individuals who fall below the established criterion in one of the areas may be considered for admission. Such individuals may be required to take additional course work to remove deficiencies or required to demonstrate proficiency in certain areas. The student's advisory committee will determine any deficiencies and recommend appropriate remedies.

To ensure that the mathematical prerequisites have been met, any student not enrolled in the mathematics degree program or the Master of Education in secondary education mathematics track must obtain permission from the Department of Mathematical Sciences to register for any graduate course offered by the department.

Degree Requirements

The Master of Arts degree requires a total of 30 semester hours of graduate work in the mathematics and statistics. The Master of Science degree requires a total of 30, which may include

up to 6 hours of graduate course work from outside the department. To fulfill part of these requirements each student must select one of the following plans:

A. Thesis Plan
Each student must complete two semester hours of seminar (MAT 595) and four semester hours of thesis (MAT 599). Each student must present a thesis, acceptable to the advisory committee, prior to graduation. The student will report orally on the thesis to a general audience during the final semester before graduation. The thesis defense will be followed by an oral examination on the student's course work.

B. Non-thesis Plan
Each student must complete two semester hours of seminar (MAT 595) and a one-semester hour research project (MAT 596). The student must successfully complete a written comprehensive examination administered during the semester the student plans to graduate.

Course Requirements

A. Each student must complete two required core sequences:

1.	Either	MAT 511-512 Real Analysis I, II	(3-3)
	or	MAT 518-519 Applied Analytical Methods I, II	(3-3)
2.	Either	MAT 541-542 Modern Algebra I, II	(3-3)
	or	MAT 535 Linear Programming, and	(3)
		MAT 536 Discrete Optimization	(3)

B. In addition to the courses listed above, for the Master of Science degree a student must complete two courses selected from: MAT (CSC) 525 Numerical Analysis (3), MAT (STT) 565 Applied Probability (3), any one statistics course.

The remaining hours of course work are selected in consultation with an advisor, who will assist in selecting those courses best suited to the student's goals and interests. A candidate for the M.S. degree may petition the graduate coordinator for permission to apply up to six hours of graduate coursework from outside the department toward fulfillment of degree requirements. This petition, which requires approval of the graduate advisors, must address the relevance of this coursework to the student's academic goals and to a coherent program of study. A departmental advisory committee must approve the student's plan of study before the beginning of the second semester of residence. Detailed advising guidelines supplied by the department recommend courses for students preparing for further graduate work; for careers in teaching community college of secondary school; and for careers in industry, business and government.

BACHELOR'S/MASTER'S DEGREE PROGRAM

The bachelor's/master's degree program is designed to provide a student in mathematics a means to complete the requirements for both degrees in a period of five years. The key feature of the program is that a student can count up to 12 hours of graduate level courses satisfying requirements for the B.A. or B.S. towards the M.A. or M.S. in mathematics.

A. Students in the B.A. or B.S. program in mathematics who have:
   1. Completed a minimum of seventy-five (75) and a maximum of ninety-eight (98) credit hours in their undergraduate programs in mathematics, including credits earned from advanced placement if they started at UNCW or are transfer students and have completed a minimum of two semesters as a full-time student at UNCW, a minimum of 24 hours.
   2. Completed a minimum of nine (9) hours of 300-400 level mathematics or statistics courses.
   3. A minimum accumulated grade point average (gpa) of 3.0/4.0 and a minimum grade point average (gpa) of 3.0/4.0 on all 300-400 level mathematics or statistics courses at UNCW

   Students may apply to the department chair for permission to apply up to 12 credit hours of graduate level course work during their senior year toward their future master's degree.

B. In his/her senior year, the student must submit the standard application for admission to the Graduate School including: an application form, application fee, transcripts, and GRE scores to the Graduate School. In addition, a graduate degree plan, signed by the prospective student, the department chair, and graduate coordinator must be submitted before the end of the senior year. Departmental permission to apply to the bachelor's/master's degree program does not guarantee admission to the Graduate School. Admission is contingent of meeting eligibility requirements at the time of entering the graduate program.

C. The graduate degree plan for the master's degree must clearly indicate:
   - Courses (maximum of 12 graduate credit hours) that will be double-counted for both bachelor's and master's degree;
   - Additional graduate courses that will be taken but not counted toward the bachelor's degree;
   - Courses that will be taken after matriculation into the graduate program;
   - Intended graduation date for the master's degree.

D. Upon review of the submitted materials by the Graduate School, a letter of acceptance (or denial) to the master's program, will be sent to the student and copied to the department chair and graduate coordinator. Acceptance will be provisional and contingent upon meeting specified degree requirements, including completion of the bachelor's degree.

E. Any changes in the graduate degree plan must be submitted in writing and approved by the department chair. A student who is ineligible to participate or continue in, or withdraws from the bachelor's/master's program can not double count any courses for both bachelor's and master's degree.

For more details see the department chair or the graduate coordinator.

GRADUATE PROGRAM IN MATHEMATICS
Course Descriptions
MATHEMATICS

MAT 504. (CSC 504) Advanced Discrete Structures (3) Prerequisite: An undergraduate combinatorics or discrete mathematics course or consent of instructor. Survey of the mathematical foundations of computer science. Mathematical logic, set theory, algebraic structures, lattices and Boolean algebra, graph theory, introduction to computability theory.

MAT 509. (CSC 509) Design and Analysis of Algorithms (3) Prerequisite: An undergraduate data structures course. Theory of the design of efficient computer algorithms. Algorithms for sorting, searching, matrix operations, fast Fourier transforms, pattern matching, polynomial arithmetic and operations on graphs. Additional topics selected from NP–completeness, recursion, data structure selection and complexity.

MAT 511–512. (411–412) Real Analysis (3–3) Prerequisite: Permission of department. Advanced study of convergence, continuity, differentiation and integration in Euclidean space. The real number system, basic topology of Euclidean spaces; sequences and series; continuity, differentiation of vector–valued functions, uniform continuity; theory of integration; implicit and inverse function theorems, Stokes' Theorem.

MAT 513. Measure and Integration (3) Prerequisite: MAT 512. Abstract measure theory. Lebesgue measure, integration, convergence theorems, absolute continuity, differentiation, Radon–Nikodym Theorem, product measures, Fubini's Theorem, Lebesgue spaces, convolution.

MAT 515. (415) Introduction to Complex Variables (3) Prerequisite: Advanced calculus or MAT 511. A first study of functions of a complex variable. Algebra of complex numbers, elementary functions with their mapping properties; analytic functions; power series; integration, Cauchy's Theorem, Laurent series and residue calculus; elementary conformal mappings and boundary value problems.

MAT 516. Complex Analysis (3) Prerequisite: MAT 511 and 515. Advanced study of complex–valued functions. Holomorphic and harmonic functions, Cauchy's Integral Theorem, Poisson's kernel and the Dirichlet problem, conformality, the Riemann Mapping Theorem, analytic continuation. Additional topics chosen from univalent, entire, meromorphic functions; Riemann surfaces; asymptotic methods; Mittag–Leffler, Runge and Weierstrass factorization theorems.

MAT 518–519. (418–419) Applied Analytical Methods (3–3) Prerequisite: Undergraduate differential equations and advanced calculus. A thorough treatment of the solution of initial and boundary value problems of partial differential equations. Topics include classification of partial differential equations, the method of characteristics, separation of variables, Fourier analysis, integral equations and integral transforms, generalized functions, Green's functions, Sturm–Liouville theory, approximations, numerical methods.

MAT 521. (421) Number Theory (3) Prerequisite: Permission of department. Use of algebraic techniques to study arithmetic properties of the integers and their generalizations. Primes, divisibility and unique factorization in integral domains; congruences, residues and quadratic reciprocity; diophantine equations and additional topics in algebraic number theory.

MAT 525. (425) (CSC 525/425) Numerical Analysis (3) Prerequisite: Undergraduate linear algebra, differential equations, and elementary numerical methods. Introduction to the theoretical foundations of numerical algorithms. Solution of linear systems by direct methods; least squares, minimax, and spline approximations; polynomial interpolation; numerical integration and differentiation; solution of nonlinear equations; initial value problems in ordinary differential equations. Error analysis. Certain algorithms are selected for programming.

MAT 531. Linear Algebra (3) Prerequisite: Permission of department. Theory of vector spaces, linear mappings and matrices. Determinants, eigenvalues, canonical forms, the Cayley–Hamilton Theorem, inner product spaces and positive definite matrices.

MAT 535. (435) Linear Programming (3) Prerequisite: Undergraduate linear algebra and computing experience. Methods and applications of optimizing a linear function subject to linear con-

straints. Theory of the simplex method and duality; parametric linear programs; sensitivity analysis; modeling and computer implementation.

MAT 536. (436) Discrete Optimization (3) Prerequisite: MAT 535. Theory and applications of discrete optimization algorithms. Transportation problems and network flow problems; integer programming; computer implementation.

MAT 537. Nonlinear Programming (3) Prerequisite: Advanced calculus and MAT 535. Theory and applications for constrained and unconstrained nonlinear optimization. Theory of convex sets, convex and concave functions, Kuhn–Tucker conditions, duality, algorithm convergence; computational methods including penalty and barrier functions, gradient projection, and quadratic programming.

MAT 541. Modern Algebra I (3) Prerequisite: Permission of department. Introduction to group theory. Binary structures including semigroups and lattices; finite groups, structure theorems, Sylow theorems and applications; group actions; free groups and presentations; structure of abelian groups.

MAT 542. Modern Algebra II (3) Prerequisite: MAT 541. Introduction to rings and fields. Modules, integral domains, vector spaces. Structure of polynomial rings and their relation to linear algebra. Field extensions and Galois theory.

MAT 551. (451) Topology (3) Prerequisite: Permission of department. A study of the basic concepts of general topology. Metric spaces, continuity, completeness, compactness, connectedness, separation axioms, product and quotient spaces; additional topics in point–set topology.

MAT 557. (457) Differential Geometry (3) Prerequisite: Advanced calculus. Theory of curves and surfaces in Euclidean space. Frenet formulas, curvature and torsion, arc length; first and second fundamental forms. Gaussian curvature, equations of Gauss and Codazzi, differential forms, Cartan's equations; global theorems.

MAT 563. (463) Ordinary Differential Equations (3) Prerequisite: Undergraduate linear algebra and differential equations. Advanced study of ordinary differential equations. Existence and uniqueness; systems of linear equations, fundamental matrices, matrix exponential; series solutions, regular singular points; plane autonomous systems, stability and perturbation theory; Sturm–Liouville theory and expansion in eigenfunctions.

MAT 564. Applied Analytical Models (3) Prerequisite: MAT 519. Topics in applied analysis of current interest. Topics may include tensor analysis and relativity, quantum mechanics, control theory, fluid mechanics, waves, ocean circulation, and mathematical models in biology or economics.

MAT 565. (465) (STT 565/465) Applied Probability (3) Prerequisite: A calculus-based statistics course. The formulation, analysis and interpretation of probabilistic models. Selected topics in probability theory. Conditioning, Markov chains, and Poisson processes. Additional topics chosen from renewal theory, queueing theory, Gaussian processes, Brownian motion, and elementary stochastic differential equations.

MAT 569. (STT 569) Stochastic Processes in Operations Research (3) Prerequisite: MAT/STT 565. Probabilistic models with applications in operations research. Queueing theory, birth–death processes, embedded Markov chains, finite and infinite waiting room systems, single and multi–server queues, general service distributions; Markov decision processes; reliability.

MAT 581. (481) Introduction to Mathematical Logic (3) Prerequisite: Permission of department. The formal study of truth and provability. Propositional calculus; predicate calculus. Gödel's com-

pleteness theorem, applications to formal number theory and incompleteness. Additional topics chosen from areas such as undecidability or non–standard analysis.

MAT 592. Advanced Topics in Mathematics (3) Prerequisite: Consent of instructor. Advanced topics of current interest in pure and applied mathematics not covered in existing courses.

MAT 595. Research Seminar (2) Prerequisite: Consent of instructor. Designed to give the student experience in locating and learning mathematics outside the classroom setting. Use of the major mathematics journals, professional society publications and standard references including Mathematical Reviews. The nature of research in the mathematical sciences and research methodology.

MAT 596. Research Project (1) Corequisite: MAT 595. (Not intended for students who write a thesis in mathematics.) Under faculty supervision, each student presents a written exposition of the history, current knowledge, future directions, and bibliography of a mathematical topic.

MAT 599. Thesis (1–4)

STATISTICS

STT 500. Research Consultation (1-3) Prerequisite: Consent of instructor. Statistical consultation on graduate thesis research provided through access to the Department of Mathematics and Statistics' Statistical Consulting Center. May be repeated for a total of three credit hours.

STT 505. Data Analysis (3) Prerequisite: Any statistics course. Introduction to exploratory data analysis. Use of stem and leaf plots, boxplots. Transformations of data, resistant lines, analysis of two–way tables, residual analysis. Comparison of robust/resistant methods with standard statistical techniques.

STT 511. (411) Design of Experiments and Analysis of Variance (3) Prerequisite: Any elementary statistics course. Review of elementary statistics; design of experiments including completely randomized, randomized block, factorial, split–plot, and repeated measures designs; analysis of variance; non–parametric alternative methods of analysis. Statistical software packages will be used as appropriate in problem solving.

STT 512. (412) Applied Regression and Correlation (3) Prerequisite: Any elementary statistics course. Review of elementary statistics; linear and multiple regression; correlation. Statistical software packages will be used as appropriate in problem solving.

STT 520. (420) Biostatistical Analysis (3) Prerequisite: Statistical programming and consent of instructor. Statistical methods used in epidemiologic studies and clinical trials. Topics include measures of association, logistic regression, covariates, life tables and Cox regression; statistical analysis using SAS.

STT 525. (425) Categorical Data Analysis (3) Prerequisite: Statistical programming and consent of instructor. Introduction to the analysis of qualitative data. Basic methods of summary and inference for two and three way contingency tables; introduction to the generalized linear model for binary and Poisson data; focus on multinomial responses (nominal and ordinal) and matched pairs data; statistical analysis using SAS.

STT 530. (430) Introduction to Non–parametric Statistics (3) Prerequisite: A calculus-based statistics course. Theory and methods of non–parametric statistics in the one– and two–sample

problems and their comparisons with standard parametric procedures. Non–parametric tests for comparing more than two samples; tests of randomness and independence.

STT 535. (435) Applied Multivariate Analysis (3) Prerequisite: STT 511, 512. Matrix manipulations; multivariate normal distribution; inference for mean vector and covariance matrix; multivariate analysis of variance; principal components; canonical correlations; discriminant analysis; factor analysis; cluster analysis; statistical analysis using SAS.

STT 540. (440) Linear Models and Regression Analysis (3) Prerequisite: A calculus-based statistics course. Theoretical introduction to the general linear model and its application to simple linear regression and multiple regression. Estimation and hypothesis testing of model coefficients; residual analysis; analysis of covariance.

STT 565. (465) (MAT 565/465) Applied Probability (3) Prerequisite: A calculus-based statistics course. The formulation, analysis and interpretation of probabilistic models. Selected topics in probability theory. Conditioning, Markov chains, and Poisson processes. Additional topics chosen from renewal theory, queueing theory, Gaussian processes, Brownian motion, and elementary stochastic differential equations.

STT 566–567. (466–467) Mathematical Statistics (3–3) Prerequisite: A calculus-based statistics course. A rigorous introduction to mathematical statistics. Univariate and multivariate probability distributions; conditional and marginal distributions; theory of estimation and hypothesis testing; limiting distributions and the central limit theorem; sufficient statistics and the exponential class of probability density functions.

STT 569. (MAT 569) Stochastic Processes in Operations Research (3) Prerequisite: MAT/STT 565. Probabilistic models with applications in operations research. Queueing theory, birth–death processes, embedded Markov chains, finite and infinite waiting–room systems, single and multi–server queues, general service distributions; Markov decision processes; reliability.

STT 592. Topics in Statistics (3) Prerequisite: Consent of instructor. Topics in statistics of current interest not covered in existing courses.

MATHEMATICS FOR MIDDLE GRADES TEACHERS

The following courses are open only to students enrolled in the middle grades education track of the Master of Education degree program.

MAE 501. Axiomatic Systems (3) Prerequisite: Permission of the Mathematical Sciences Department. Open only to graduate students in middle grades education. An introductory treatment of logic and methods of proof. Elementary set theory, relations, functions, cardinality, the real number system and topics from axiomatic systems. Emphasis on precision in the language of mathematics and rigor in proofs. Students gain experience in communicating mathematics through presentations.

MAE 502. Introduction to Statistics in Practice (3) Prerequisite: Permission of the Mathematical Sciences Department. Open only to graduate students in middle grades education. (Designed for students majoring in the social sciences.) Graphical and numerical methods for univariate data; bivariate data organization and measures of association; contingency table analysis; sampling distributions; estimation and hypothesis testing; introduction to linear regression and correlation.

MAE 505. Modern College Geometry (3) Prerequisite: Permission of the Mathematical Sciences Department. Open only to graduate students in middle grades education. Use of elementary

methods in advanced study of the triangle and circle, special emphasis on solving original examples, comparison of Euclidean and non-Euclidean and projective geometries.

MAE 506. Historical Developments of Mathematics (3) Prerequisites: Permission of the Mathematical Sciences Department. Open only to graduate students in middle grades education. Development of mathematics from earliest systems to present century. Personalities involved with the contributions of each. A problem-study approach to give the student some training in research.

MAE 592. Topics in Mathematics (3) Prerequisite: Permission of the Mathematics and Statistics Department. Open only to graduate students in middle grades education. Topics in mathematics not covered in existing MAE courses. May be repeated for credit.

MASTER OF ARTS IN PSYCHOLOGY

The Department of Psychology offers a program leading to the Master of Arts in psychology. The specific goals of the programs are to emphasize the scientific methods and principles common to all fields of psychology. Within the program there are two separate concentrations:

1) a general psychology concentration with a major goal to prepare students for entry into doctoral programs in applied or experimental psychology;
2) a substance abuse treatment psychology concentration. The purpose of this concentration is to help prepare students for the North Carolina Psychological Associate Licensure Examination and the North Carolina Clinical Addictions Specialist Examination.

Admission Requirements

Applicants seeking admission to the graduate program in psychology are required to submit the following to the Graduate School:

1. An application for graduate admission
2. Official transcripts of all college work (undergraduate and graduate)
3. Official scores on the Graduate Record Examination
4. Three recommendations from educators or others with professionally relevant information

Students who have majored in psychology or who have taken substantial coursework in psychology while majoring in another field will be considered for acceptance into the program. Students desiring admission into the graduate program in psychology must meet the following requirements: (a) a bachelor's degree from an accredited college or university or its equivalent from a foreign institution of higher education; (b) a strong academic record with an average of "B" or better in at least 21 hours of psychology courses, including statistics and a psychology research methods course; (c) satisfactory scores on the Graduate Record Examination.

Because admission decisions will be based upon careful consideration of all relevant factors, individuals who have indicators of success may be admitted even though they fall below some specified criteria. Individuals with identified deficiencies may be accepted provisionally with specified plans and goals for the remediation of those deficiencies. Such remediations may include a requirement of additional hours beyond those normally required for the degree.

Complete applications which are received by January 15 will be given first consideration for the following fall semester. Applications received after that date will be reviewed on a space-available basis. The admissions procedure may also include an invited interview with psychology department faculty. All interested applicants will be considered for graduate assistantships, which will be awarded on a competitive basis when they become available.

Degree Requirements

1. The general concentration will require a minimum of 33 semester hours; the substance abuse treatment concentration will require a minimum of 53 hours.
2. Courses open only to graduate students: All students will take at least 33 hours of coursework open only to graduate students.
3 Students must maintain a "B" average in all graduate courses taken. A student ineligible to continue because of poor grades, based upon special circumstances, may petition the Graduate School for reinstatement. A petition for reinstatement must be accompanied by statements of endorsement or non-endorsement from both the department chairperson and the dean of the College of Arts and Sciences. A student so reinstated will be dismissed if any additional grade below that of "B" is earned.
4. A minimum of 26 semester hours of graduate study must be completed in residence.
5. A faculty committee, composed of a chairman and at least two other members of the Graduate Faculty, will be established for each student within the first two semesters in residence. One committee member may be from outside the field of concentration. This committee will oversee the student's thesis and program of study.

6. A comprehensive written examination must be successfully completed. This is usually done during the semester in which the student is enrolled in final course work.
7. The student will present and defend a thesis which is acceptable to the faculty committee prior to graduation.
8. Satisfactory completion of eight hours of Research Methods courses is required.
9. Each student must complete an approved course of study within five years of the date of the first registration for graduate study to be eligible for graduation.
10. PSY 591 may be repeated only once for credit toward the graduation requirement.

Requirements for the Master of Arts in psychology

Core courses: required of all students seeking a Master of Arts in psychology.

I. Research Methods (eight hours required of all students)

PSY 555	Psychological Research Methods I	(4)
PSY 579-580	Advanced Research Practicum	(1-1)
PSY 589	Psychological Research Methods II	(3)

II. Required courses

PSY 510	Cognitive and Developmental Psychology	(3)
PSY 517	Learning and Behavior Analysis	(3)
PSY 556	Advanced Physiological Psychology	(3)
PSY 565	Personality and Social Psychology	(3)

III. PSY 599 Thesis (six hours to be taken over at least two semesters)

General psychology requirements:

In addition to the core courses, students seeking a Master of Arts in psychology under the general psychology concentration must also complete the following:

PSY 595	Topical Seminar	(3)

Students electing the general concentration are required to take a minimum of two three-hour seminars.

Substance abuse treatment psychology requirements:

In addition to the core courses, students seeking a Master of Arts in psychology under the substance abuse treatment psychology concentration must also complete the following:

PSY 525	Psychological Assessment I	(3)
PSY 526	Psychological Assessment II	(3)
PSY 545	Chemical Dependency	(3)
PSY 547	Advanced Psychopathology	(3)
PSY 549	Basic Interviewing Skills in the Treatment of Substance Abuse	(2)
PSY 550	Advanced Psychotherapy	(3)
PSY 551	Intervention Strategies in Alcohol & Drug Problems	(3)
PSY 552	Ethical and Legal Issues in Mental Health	(1)
PSY 594	Psychotherapy Practicum	(2)
PSY 598	Internship	(3)

GRADUATE PROGRAM IN PSYCHOLOGY
Course Descriptions

PSY 510. Cognitive and Developmental Psychology (3) Prerequisite: Course in cognition, perception, and developmental psychology and permission of instructor. Examination and evaluation of research and theories concerning: 1) processes of human cognition such as memory, thinking, attention, and problem solving; and 2) areas of human and nonhuman development such as social, emotional, motor behavior, and cognitive.

PSY 516. (416) Adult Development and Life Transitions (3) Explores the major normative and non-normative changes which take place during adulthood. Operating from a lifespan perspective, topics include an examination of how adults initiate, understand, cope with and resolve life transitions (e.g. parenting, loss, illness, career change, relationship change).

PSY 517. Learning and Behavior Analysis (3) Prerequisite: Course in learning and permission of instructor. Advanced topics in animal and human learning and the analysis of behavior, including theories, research methods, and experimental findings.

PSY 524. The Psychology of Aging (3) Prerequisite: Course in aging or gerontology or permission of instructor. Advanced topics on the effects of aging on a variety of psychological processes including attention, memory, complex cognition, personality, mental health, and social support.

PSY 525. Psychological Assessment I (3) Prerequisite: Admission into the substance abuse treatment psychology concentration and permission of instructor. Role, administration, and responsible uses of psychological testing. Topics include administration and interpretation of basic vocational, aptitude, intelligence, and personality tests and interpretation of assessment reports prepared by others.

PSY 526. Psychological Assessment II (3) Prerequisite: PSY 525. Topics include objective personality assessment, objective psychopathology assessment, behavioral and physiological assessment, projective testing, substance abuse assessment, and report writing. Course will include instruction and rehearsal in test administration and interpretation. A grade of "B" or better must be earned for subsequent registration in PSY 594.

PSY 545. (445) Chemical Dependency (3) Prerequisite: Course in drugs and behavior or permission of instructor. Topics include basic psychopharmacology, theory, method, and research in the study of substance abuse and advanced consideration of causes, consequences and treatments of the major addictive disorders.

PSY 547. Advanced Psychopathology (3) Prerequisite: Course in psychopathology and permission of instructor. Etiology, assessment, and treatment of the major psychological disorders. Emphasis is on appropriate use of diagnostic systems and on ethical and legal issues in diagnosis.

PSY 549. Basic Interviewing Skills in the Treatment of Substance Abuse (2) Prerequisite: Admission into the substance abuse treatment psychology concentration or permission of instructor. Introduction to therapeutic interviewing and active listening skills that will facilitate behavior change in substance abusing clients. Format includes lecture, readings, and experiential exercises. A grade of "B" or better must be earned for subsequent registration in PSY 550.

PSY 550. Advanced Psychotherapy (3) Prerequisite: Admission into the substance abuse treatment psychology concentration, PSY 547, an undergraduate course in theories of psychotherapy or counseling, and permission of the instructor.. Advanced study of major theories of psychotherapy, psychotherapy research, and psychotherapy skills. Practical interviewing and intervention skills are emphasized. Format includes lecture, independent reading, and experiential exercises.

PSY 551. Intervention Strategies in Alcohol and Drug Problems (3) Prerequisite: PSY 545, PSY 550, and permission of instructor. Review of multidisciplinary theory and practice in treatment of alcohol and drug dependent clients. Topics include nondirective approaches, cognitive/behavioral approaches, 12-step approaches, family therapy, and group process. Format includes lecture and experiential exercises.

PSY 552. (452) Ethical and Legal Issues in Mental Health (1) Prerequisite: Permission of instructor. Ethical and legal issues involved in psychological testing, research, and treatment. Topics include confidentiality, networking with other agencies, involuntary commitment, psychology and the law, and review of ethical principles.

PSY 555. Psychological Research Methods I (4) Prerequisite: Course in research methods in psychology and permission of instructor. Advanced study of research design and statistical analysis applicable to research in psychology. Topics, taught from an advanced perspective, include analysis of variance, correlational and nonparametric techniques.

PSY 556. Advanced Physiological Psychology (3) Prerequisite: Physiological psychology course and permission of instructor. Advanced topics in the anatomical and physiological study of the nervous system and behavior. Topics include brain-behavior relationships, neuropathologies, advantages and disadvantages of different techniques in neuroscience, and brain mechanisms of reward and drug addiction.

PSY 565. Personality and Social Psychology (3) Prerequisite: Course in personality or social psychology and permission of instructor. Current research trends in social and personality psychology. Emphasis is on the relation of personality and situational factors in determining behavior.

PSY 579-580. Advanced Research Practicum (1-1) Students may participate in a variety of different research projects. Ongoing research opportunities include practica in cognitive development, behavioral pharmacology, neuropharmacology, animal behavior, social psychology, clinical issues, behavioral medicine and others.

PSY 589. Psychological Research Methods II (3) Prerequisite: PSY 555. Overview of the various research strategies and designs used in psychology. Application and extension of methods learned in Psychological Research Methods I to contemporary research problems in psychology.

PSY 591. Directed Independent Study (1-3) May be repeated once for credit.

PSY 592. Special Topics in Psychology (1-3) Prerequisite: Permission of instructor. Study of topics or issues not covered in existing classes. Elective course that may be repeated for credit.

PSY 594. Psychotherapy Practicum (2) Prerequisite: PSY 525, PSY 526, PSY 550, PSY 552, PSY 580 and consent of instructor. Practical experience at designated local and campus agencies; supervision and seminar on campus. Application of ethical principles and development of attending, responding, and interviewing skills under supervision of UNCW clinical psychology faculty and site supervisors. A grade of "B" or better must be earned for subsequent registration in PSY 598.

PSY 595. Seminar (3) Prerequisite: Permission of instructor. Advanced topics in psychology. Examples of seminars offered include: Advanced Topics in Substance Abuse, Animal Behavior, Behavioral Neuroscience, Behavior Analysis, Behavioral Medicine, Chemical Dependency, Clinical Neuropsychology, Cognitive Psychology, Developmental Psychology, Dual Diagnosis, Family Therapy, Psychological Aspects of HIV Infection, Psychopharmacology, Psychotherapy, Rehabilitation Psychology, Sensation and Perception, Social and Community Psychology, Statistics and Computer Applications, and Women and Alcohol. May be repeated for additional credit.

PSY 598. Internship (1-3) Prerequisite: PSY 525, PSY 547, PSY 551, PSY 552, PSY 594 with a grade of "B" or better, and permission of instructor. One thousand hours of supervised practice in the application of psychological assessment and psychotherapy skills. Trainees work in an

applied setting where substance abuse therapy is offered refining clinical skills with regular consultation with a supervisor.

PSY 599. Thesis in Psychology (1-6) Prerequisite: PSY 580. Intensive study of topic selected by student and approved by thesis committee. Includes definition of problem, review of related literature, application of appropriate methodology, and interpretation of results and conclusions. Oral presentation and defense of thesis required.

MASTER OF PUBLIC ADMINISTRATION

The Master of Public Administration (MPA), housed in the Department of Political Science in the College of Arts and Sciences, is an interdisciplinary, terminal professional degree designed to: provide a broad education for individuals expecting to enter government and nonprofit institutions and who aspire to management positions; enhance the capabilities and performance of those individuals currently in management positions in southeastern North Carolina; produce relevant public administration research; and provide active public service aimed at the support and improvement of public administration and nonprofit management in southeastern North Carolina.

The three primary foci of the MPA program are as follows:

1) Skill in the Management of Public/Nonprofit Organizations
   - human resources
   - budgeting and financial processes
   - information management, including computer systems and applications
   - application of quantitative and qualitative techniques in policy analysis, program development, program evaluation, and policy and program implementation
   - decision-making and problem-solving

2) Understanding of Public Policy and Organizational Environment
   - political institutions and processes
   - legal institutions and processes
   - economic institutions and processes
   - social institutions and processes
   - organization and management concepts and behavior

3) Awareness of Ethics in the Management of Public/Nonprofit Organizations
   - responsible exercise of administrative discretion in a political environment
   - understandable and accurate communication of data to citizens and elected officials
   - advancing the public interest

   Furthermore, concentrated areas of study will be provided in:
   - Coastal Management
   - Environmental Management
   - Public Policy Analysis and Management
   - Customized concentrations such as Nonprofit Management

Admission Requirements

Deadline for submitting applications for fall admission is April 15 and September 1 for spring admission; in any case application will be accepted and considered until the class is filled. Applicants seeking admission to the Master of Public Administration program are required to submit the following to the Graduate School

1. An application for graduate admission
2. Official transcripts of all college work (undergraduate and graduate)
3. Official scores on the Graduate Record Exam (GRE) or the Graduate Management Admission Test (GMAT).
4. Three recommendations from individuals who are in a position to evaluate the applicant's professional competence as well as potential for graduate study (ideally at least one reference should be an academic instructor).
5. A personal statement describing educational and professional experiences, their reasons for pursuing graduate study in public administration, and career goals

Applicants seeking admission to the program must have a bachelor's degree from an accredited college or university, or its equivalent from a foreign institution of higher education based on

a four-year program; a strong academic record with an average GPA of 3.0 or better in the undergraduate program; academic potential as indicated by satisfactory performance on the GRE General Test or GMAT. Individuals who fall below a specified criterion may be admitted if other factors indicate potential for success. Individuals with identified deficiencies may be accepted provisionally with specified plans and goals for the remediation of these deficiencies. Such remediation may include a requirement of additional hours beyond those normally required for the degree.

Degree Requirements

Option 1 - Non-Thesis

The program requires the satisfactory completion of 42 credit hours of approved graduate level courses or a minimum of 39 credit hours if the internship or practicum requirement is waived (see below).

The program requirements consist of the following: 18 credits of core classes designed to provide the basic skills needed by managers and policy analysts working in public and nonprofit organizations; 3 credits of an internship or practicum designed to link theory with practice; three credits of an applied skill-based elective; and between nine and 12 credits of an approved concentration. Students can take their remaining six to nine credits from electives offered by the Political Science Department or choose approved electives offered by other departments or universities.

Option 2 - Thesis

"Students wishing to complete a thesis may do so by pursuing a thesis option which requires:

1) Creating a Thesis Committee consisting of a chairperson and two additional members of the Graduate Faculty. At least two members of the committee including the chairperson must be from the Department of Political Science. This committee will oversee the student's thesis. Students are advised to create this faculty committee no later than the third semester of enrollment.
2) Prepare and defend a thesis proposal following departmental guidelines.
3) Prepare and defend a thesis that is acceptable to the individual's thesis committee.
4) Complete at least 6 hours of PLS 599 Thesis
5) Complete at least 45 hours of graduate credit, three hours more than students who do not pursue this option.

Students who pursue the thesis option are not required to take PLS 595: The Capstone Seminar in Public Administration.

Core Requirements (18 credit hours)

All students are required to complete the following classes:

PLS 510	Political, Social and Economic Context of Public Administration	(3)
PLS 500	Managing Public and Nonprofit Organizations	(3)
PLS 502	Public Human Resources Administration	(3)
PLS 503	Public Budgeting and Finance Administration	(3)
PLS 506	Research Methods and Program Evaluation	(3)
PLS 595	Capstone Seminar in Public Administration	(3)

Internship or Practicum (3 credit hours)

Students must do an internship or practicum unless the requirement is waived. In general, the practicum will be the option used by working professionals who do not have the flexibility to participate in an internship. The practicum requires an applied research paper(s) examining a management or policy issue at the student's work place. Requests for a waiver from the internship or practicum requirement must be made in writing and be approved by the student's advi-

sor and the MPA coordinator. Waivers will only be considered if the student can demonstrate a minimum of five years of significant management or policy-related professional experience.

PLS 598	Internship in Public Administration	(3)
PLS 594	Practicum in Public Administration	(3)

Applied Skill-Based Electives (3 credit hours)

All students are required to take one of the following applied skill-based electives, however, students can take additional classes as their electives. Students should consult with their advisors to select the appropriate course. This requirement is waived for students in the public policy analysis and management concentration.

PLS 501	Statistics for Public Administrators and Policy Analysts	(3)
PLS 504	Computer Applications and MIS in Public Administration	(3)
PLS 505	Applied Policy Analysis and Cost-Benefit Analysis	(3)
PLS 507	Applied Management Tools, Skills, and Techniques	(3)

Concentrations (9-12 credit hours)

All students are also required to pursue a concentrated area of study in Coastal Management (12 credits), Environmental Management (12 credits), or Public Policy Analysis and Management (12 credits). Students can also elect to design their own nine credit concentrations in areas such as nonprofit management, health policy, gerontology, and public history. Students wishing to design their own concentrations should consult with their advisor or the MPA coordinator.

Coastal Management (12 credit hours)

All students pursing a concentration in coastal management must complete the following requirements:

PLS 520	Seminar in Coastal Processes and Problems	(3)
PLS 521	Legal Foundations of Coastal and Environmental Management	(3)
PLS 522	Field Seminar in Coastal Management	(3)

Students must take an additional three credit hours of an approved elective.

Environmental Policy and Management (12 credit hours)

All students pursing a concentration in environmental management must complete the following requirements:

EVS 501	Introduction to Environmental Problems and Policy	(3)
PLS 521	Legal Foundations of Coastal and Environmental Management	(3)
PLS 522	Field Seminar in Coastal Management	(3)

Students must take an additional three credit hours of an approved elective.

Public Policy Analysis and Management (12 credit hours)

All students pursing a concentration in public policy analysis and management must complete the following requirements:

PLS 501	Statistics for Public Managers	(3)
PLS 505	Applied Policy Analysis and Cost-Benefit Analysis	(3)
PLS 507	Applied Management Tools, Skills, and Techniques	(3)

Students must take an additional three credit hours of an approved elective.

Customized Concentration (9 credit hours)

Students can also elect to design their own nine credit concentration in areas such as nonprofit management, health policy, or gerontology. Classes offered by the political science department, by other departments on campus, and by other universities can be part of the concentration. Students wishing to design their own concentrations should consult with their advisor or the MPA coordinator.

Approved Electives (6 to 9 credit hours)

Students generally have to complete an additional 6 to 9 credits in order to fulfill their degree requirements. Students have the following options: take additional classes offered as applied skill-based electives; take classes offered as concentration classes; take classes listed as electives below; take approved electives offered by other departments or universities. Students should consult with their advisor and the MPA coordinator when planning their program of study and selecting their electives.

PLS 508	Ethics and Leadership in Public Life	(3)
PLS 513	Politics and Planning at the State and Local Level	(3)
PLS 524	Managing Coastal Hazards	(3)
PLS 525	Managing Coastal Ecosystems	(3)
PLS 526	Environmental Policy and Management	(3)
PLS 592	Special Topics in International Public Administration and Policy	(3)
PLS 530	Management Practices in Nonprofit Organizations	(3)
PLS 531	Resource Development in Nonprofit Organizations	(3)
PLS 532	Issues in Nonprofit Management	(3)

GRADUATE PROGRAM IN PUBLIC ADMINISTRATION
Course Descriptions

PLS 500. Managing Public and Nonprofit Organizations (3) Provides an overview of theories of organization, decision making, leadership, motivation, communication, and conflict resolution in the environment of public and nonprofit organizations.

PLS 501. Statistics for Public Managers and Policy Analysts (3) Issues and techniques in data collection and statistical analysis for managers and policy analysts in public and nonprofit organizations.

PLS 502. Public Human Resources Development and Administration (3) The study of policies, methods and techniques utilized in the public human resource function. Special attention is given to challenges reflecting contemporary demands in the areas of recruitment, training, compensation, performance evaluation, motivation, labor relations, sexual harassment, and diversity in the public workforce.

PLS 503. Public Budgeting and Finance Administration (3) Focuses on governmental budgeting and finance at the federal, state, and local level. Topics include budget types, budget preparation, politics of the budgetary process, tax policy, revenue sources, and other public finance issues. Attention is also paid to specific issues related to budgeting and finance issues in the nonprofit sector.

PLS 504. Computer Applications and MIS in Public Administration (3) Theory and application of the use of information technology to support decision making in public organizations. Topics include the use of the Internet to share and collect information, Geographic Information Systems, and appropriate software packages.

PLS 505. Applied Policy Analysis and Cost-Benefit Analysis (3) Examines the different approaches to public policy analysis and the various techniques that an analyst uses such as cost-benefit analysis. Students complete an applied policy analysis and present results to a simulated audience.

PLS 506. Research Methods and Program Evaluation (3) Covers research methods and basic statistics including hypothesis testing and examines the theory and practice of program evaluation including the ethical issues related to the practice of program evaluation.

PLS 507. Applied Management Tools, Skills, and Techniques (3) Examines concepts, techniques, and tools used by organizations with a focus on improving management skills. Topics covered include managing meetings, giving presentations, interacting with the media, strategic planning, performance measurement, and contracting.

PLS 508. Ethics and Leadership in Public Life (3) Examination of ethics and leadership principles as they apply to the practice of public administration; basic legal constraints such as conflict of interest laws; role of codes of ethics; and models for the responsible exercise of administrative discretion by public officials.

PLS 510. Political, Social and Economic Context of Public Administration (3) Covers the rationales for public policy and critical concepts in public economics (e.g., market failures, public goods, externalities, monopolies, information asymmetries, and public choice theory). Class also examines the public policy process (e.g., context, agenda setting, implementation, evaluation, etc.), and the legal foundations of public administration (i.e., federalism, checks and balances, roles of the courts, etc.) and the basics of state and local politics in the U.S.

PLS 513. Politics and Planning at the State and Local Level (3). Explores the connection between formal planning processes and political decision making at the state and local level. Special attention is given to how planners and analysts provide advice to elected and non-elected decision makers.

PLS 520. Seminar in Coastal Processes and Problems (3) Examines various coastal management policies and problems from a variety of perspectives (e.g., legal, economic, political, scientific, etc.).

PLS 521. Legal Foundations of Coastal and Environmental Management (3) Analyzes key laws, regulations, and court decisions that influence coastal and environmental management in North Carolina and the United States. The class also provides students with a basic understanding of the role of law in public administration.

PLS 522. Field Seminar in Coastal Management (3) Field seminar that uses an applied project to examine the political, economic, and socio-cultural challenges facing coastal managers. It also examines the role of science in the policy and management process. Students are expected to collect and analyze data, prepare a report, and present their findings.

PLS 524. Managing Coastal Hazards (3) Explores the natural and technological hazards that threaten coastal areas, the principles of coastal hazard mitigation and the development of policy dealing with the preparedness, response to and recovery from the events.

PLS 525. Managing Coastal Ecosystems (3) Examines programs, policies, and approaches to managing coastal ecosystems such as watershed management, ecosystem management, command and control approaches, and market-based approaches.

PLS 530. Management Practices in Nonprofit Organizations (3) Introduction to theoretical foundations, structures, and processes of nonprofit organizations; historical development and impact of social, political, legal and economic environment in which nonprofit organizations exist; and complexities of organizational governance shared by volunteer and professional staff decision makers.

PLS 531. Resource Development in Nonprofit Organizations (3) Introduction to various resources important to nonprofit organizations including financial support, volunteers, and community awareness, and to the wide ranges of organization activities utilized for acquisition and maintenance of these resources, such as grantwriting and fundraising strategies.

PLS 532. Issues in Nonprofit Management (3) Examination of the current managerial, legal, and political challenges facing nonprofit organizations.

PLS 540. Environmental Policy and Management (3) Examines the fundamental factors that influence the development and implementation of environmental policy in the United States.

PLS 591. Directed Individual Study in Public Administration (3) Independent investigation of research problems or directed readings in a selected area of public administration.

PLS 592. Special Topics in Public Administration (3) Intensive study of selected topics in public administration. May be taken for credit three times, for a total of nine credit hours.

PLS 594. Practicum in Public Administration (3) The application of knowledge, concepts and analytical tools to contemporary issues that challenge public administrators. Individuals select special projects to pursue in local public and nonprofit organizations and conduct research under the guidance of a faculty member.

PLS 595. Capstone Seminar in Public Administration (3) Synthesizing experience at the end of the program where key concepts from the curriculum are integrated and applied to contemporary issues in public administration. Public administration as a profession and career opportunities for graduate students are discussed. Student completes an applied research project that integrates materials from the curriculum and the internship or practicum.

PLS 598. Internship in Public Administration (3) Participation in a field experience, including a journal and written report critically describing the student's responsibilities and experiences, focusing on linkages between the theory learned in coursework and the practice of public administration. Field experience will result from a supervised internship in a cooperating public or nonprofit organization.

PLS 599. Thesis in Public Administration (1-6) Prerequisites: at least 30 hours toward completion of the master's degree and permission of the MPA coordinator. Intensive study of a topic selected by the student and approved by a thesis committee. Includes definition of problem, review of related literature, application of appropriate methodology, and interpretation of results and conclusions. Oral presentation and defense of thesis are required.

POST-BACCALAUREATE CERTIFICATE PROGRAM IN ENVIRONMENTAL STUDIES

The Department of Environmental Studies offers a broad-based, multidisciplinary post-baccalaureate program in environmental studies for professionals, practitioners, citizens and students who wish to strengthen their knowledge of the environment. The program is designed to provide critical and practical skills to analyze, assess and propose solutions to environmental issues. Students may participate in the environmental studies certificate program while also enrolled in a master's degree program in a specific discipline. The objective of the certificate program is to provide students with policy and planning information that may help them gain employment or advance their current careers.

Admission Requirements

Applicants seeking admission to the environmental studies certificate program must hold a bachelor's degree from an accredited college or university in this country or its equivalent in a foreign institution based on a four-year program and have a strong overall academic record with a "B" average or better in the basic courses prerequisite to environmental studies. Applicants are required to submit the following to the Graduate School.

1. An application for graduate admission.
2. Official transcripts of all college work (undergraduate and graduate)
3. An essay on the applicant's goals in pursuing the certificate
4. Three recommendations by individuals in professionally relevant fields

Certificate Requirements

The program requires 18 hours. Students complete a team-taught core course: Introduction to Environmental Problems and Policy (3 credits) and a capstone course involving a Final Project (3 credits). Twelve hours from a list of approved electives complete the certificate program. No more than nine hours may be from the same department.

Required Courses

EVS 501	Introduction to Environmental Problems and Policy	(3)
EVS 595	Seminar/Final Project	(3)

Approved electives

BIO 534	Advanced Ecology and Laboratory	(4)
BIO 558	Biology of Recreational and Commercial Fishes	(3)
BIO 560	Estuarine Biology	(4)
BIO 561	Barrier Island Ecology	(3)
BIO 562	Wetlands in the United States and Their Management	(3)
BIO 563	Coral Reef Biology	(4)
BIO 568	River Ecology	(3)
CHM 574	Aquatic Chemistry	(3)
CHM 575	Chemical Oceanography	(3)
CHM 576	Chemical and Physical Analysis of Seawater	(3)
CHM 578	Aquatic Toxicology	(3)
CHM 579	Role of the Oceans in Human Health	(3)
ENG 551	Topics in Professional Writing	(3)
ENG 557	Theory and Practice of Technical Communication	(3)
EVS 592	Special Topics in Environmental Studies	(1-3)
EVS 598	Internship	(1-3)
GLY 520	Global Climate Change	(3)
GLY 558	Introduction to Coastal Management	(4)
GGY 522	Remote Sensing in Environmental Analysis	(3)
GGY 524	Geographic Information Systems	(3)

HST 533	Seminar: U.S. Environmental History	(3)
GLS 533	The Environmental Crisis	(3)
PLS 520	Seminar in Coastal Processes and Problems	(3)
PLS 521	Legal Foundations of Coastal and Environmental Management	(3)
PLS 522	Field Seminar in Coastal Management	(3)
PLS 524	Managing Coastal Hazards	(3)
PLS 525	Managing Coastal Ecosystems	(3)
PLS 592	Special Topics in Public Administration	(3)
MSA 566	Environmental Law	(1-3)
MSC 579	Role of Oceans in Human Health	(3)

GRADUATE CERTIFICATE PROGRAM IN ENVIRONMENTAL STUDIES
Course Descriptions

EVS 501. Introduction to Environmental Problems and Policy (3) Introduction to critical and practical skills necessary to identify, analyze, and assess environmental problems. Includes study and review of environmental policy issues.

EVS 591. Directed Independent Study (1-3) See graduate coordinator for details and permission.

EVS 592. Special Topics in Environmental Studies (1-3) Topics of special interest in environmental studies not covered by current courses. May be repeated for credit.

EVS 595. Seminar/Final Project (3) Individual report of the results of student field, laboratory or library research on selected topics in environmental planning and policies.

EVS 598. Internship (1-3) Supervised experience with credentialed professional in environmental studies.

POST-BACCALAUREATE CERTIFICATE PROGRAM IN GERONTOLOGY

The Graduate School offers a multidisciplinary post-baccalaureate program in gerontology. The goal of the program is to provide a program of instruction and educational experiences in the field of gerontology at the graduate level, i.e., an academic foundation for anyone who plans to work with aging adults. As those who serve the elderly must be aware of all aspects of aging, course work will address the biology, sociology, and psychology of aging with electives in literature, life transitions, economics, psychosocial adjustment to retirement, ethics, communication, and others. Courses are taught by faculty in a number of different disciplines such as: departments of Biology, Sociology, Psychology, English, Philosophy and Religion, Social Work, and Communications within the College of Arts and Sciences. Additional courses will be taught by faculty from the schools of Nursing, Business, and Education. This provides students with the opportunity to gain a broad perspective of the concepts and issues in aging as well as to profit from the diverse backgrounds of fellow students. The gerontology certificate may be earned in concert with other UNCW graduate degree programs such as the MALS or MPA.

Admission Requirements

Applicants seeking admission to the graduate certificate program must hold a bachelor's degree from an accredited college or university in this country or its equivalent in a foreign institution based on a four-year program and have a strong overall academic record with a "B" average or better in the basic courses prerequisite to gerontology. Applicants are required to submit the following to the Graduate School:

1. An application for graduate admission
2. Official transcripts of all college work (undergraduate and graduate)
3. An essay on the applicant's goals in pursuing the certificate
4. Three recommendations by individuals in professionally relevant fields

In addition to the above, students must satisfy the following additional requirements:

1. An interview with the Gerontology Student Admissions Committee
2. Complete the following undergraduate prerequisites, including an introductory course in gerontology or aging. (For students who have not had such a course, it is available at UNCW and should be taken prior to enrolling in any graduate level gerontology courses.)
   a. Introduction to Sociology
   b. Introduction to Psychology
   c. Statistics and Research Methodology
   d. Principles of Biology

Certificate Requirements and Teaching Methods

The program requires 21-24 semester hours. Graduate courses in gerontology focus on the seminar method of teaching and learning. Students will be required to do literature searches, to gain information from journals as well as some textbooks, and bring their findings to class to share with other students and the faculty. Although some courses will involve lecture presentations, students must be self-directed in their studies and seek information appropriately. Service learning opportunities are also part of the curriculum. Each student will complete a gerontology practicum.

Required courses (15-18 semester hours)

GRN/SOC 501	Aging and Society	(3)
PSY 524	The Psychology of Aging	(3)
GRN 523	Biology of Human Aging	(3)
GRN 590	Practicum in Gerontology	(3-6)
GRN 503	Investigative Inquiry in Gerontology	(3)

Or a substitute research course (3 semester hours required)

Electives (3-6 semester hours) to be chosen from other gerontology courses

GRADUATE CERTIFICATE PROGRAM IN GERONTOLOGY
Course Descriptions

GRN/SOC 501. Aging and Society (3) Study of age as a structural feature of changing societies and groups, aging as a social process, and age as dimension of stratification. May be taken for elective credit in the MALS program.

GRN 503. Investigative Inquiry in Gerontology (3) Prerequisite: Graduate standing. Principles of quantitative and qualitative methods used in gerontological research and inquiry. May be taken for elective credit in the MALS program.

GRN 518/SOC 518. Women and Aging (3) Examines women's experience of old age and the aging process. Specific emphasis on family, medical, and economic institutions. May be taken for elective credit in the MALS program.

GRN 523. Biology of Human Aging (3) An overview of the aging process with special emphasis on anatomical and physiological changes that occur with human aging. Current theories as to the mechanisms of aging are considered. Premature aging diseases and age-related diseases are discussed. Student presentations required. Three lecture hours each week. May be taken for elective credit in the MALS program.

GRN 524. Literature of Aging (3) Contemporary fiction and nonfiction by Philip Roth, Doris Lessing, May Sarton, and others, selected for their depictions of older protagonists and explorations of opportunities and challenges of later life, are analyzed. Literary theories, literary criticism, and gerontological scholarship contribute to the interpretations. The texts' ways of challenging our culture's ageism are emphasized. Students give oral reports, write essays, and participate in an e-mail project with a senior group in the community. May be taken for elective credit in the MALS program.

GRN 526. Psychosocial Adjustment to Retirement and Later Life (3) A seminar focusing on the psychosocial aspects of retirement and post-employment years. Theories of aging and scientific inquiry applied to retirement, and their significant others. May be taken for elective credit in the MALS program.

GRN 546. Health Care Access for the Elderly (3) Prerequisite: Introduction to Gerontology. An introduction to the US health care system with an emphasis on issues related to the elderly. Problems of access to health care for the aging population, their families, and communities. May be taken for elective credit in the MALS program.

GRN 590. Practicum in Gerontology (3) Prerequisites: GRN/SOC 501, PSY 524, GRN/BIO 523. A field experience designed to demonstrate knowledge and skills related to geriatric or gerontological practice. May be repeated once for credit. May be taken for elective credit in the MALS program.

GRN 591. Directed Individual Research in Gerontology (3) Prerequisites: Three hours of graduate work with content in human aging. May be repeated for credit with consent of program director. May be taken for elective credit in the MALS program.

GRN 595. Special Topic Seminar in Gerontology (3) Discussion of special topic related to gerontology. May be repeated for a maximum of 12 hours credit. May be taken for elective credit in the MALS program.

PAR 505. Bioethics and Aging (3) Examination of the principles and problems in the application of ethical theory to medical research and practice with emphasis on the special ethical problems of providing health care services to the aging population and involving elderly patients in medical research.

PSY 516. (416) Adult Development and Life Transitions (3) This course explores the major normative and nonnormative changes which take place during adulthood. Operating from a lifespan perspective, topics include an examination of how adults initiate, understand, cope with and resolve life transitions (i.e., parenting, loss, illness, career change, relationship change, etc.) May be taken for elective credit in the MALS program.

PSY 524. The Psychology of Aging (3) Prerequisite: Course in aging or gerontology or permission of instructor. Advanced topics on the effects of aging on a variety of psychological processes including attention, memory, complex cognition, personality, mental health, and social support. May be taken for elective credit in the MALS program.

POST-BACCALAUREATE CERTIFICATE PROGRAM IN HISPANIC STUDIES

The Department of Foreign Languages and Literatures offers an 18-hour post-baccalaureate program in Hispanic Studies. Specific goals of the certificate program are: 1) to prepare qualified candidates for cross-cultural professions; 2.) to enable students to function at a high level of linguistic proficiency in Spanish; and 3.) to prepare community college, four-year college or university instructors, who, according to SACS guidelines, must have at least 18 hours of graduate credit in order to teach Spanish. Courses are taught by faculty with specializations in Hispanic linguistics, film, literature, culture, business, translation, and foreign language pedagogy.

Admission Requirements:

Applicants seeking admission to the graduate certificate program must hold a bachelor's degree in Spanish from an accredited college or university with an overall 3.00 GPA or its equivalent (determined by a personal interview with the faculty or an officially recognized test procedure, such as an "intermediate high" grading on the ACTFL). Applicants are required to submit the following to the Graduate School:

1. An application for graduate admission
2. Official transcripts of all college work (undergraduate and graduate)
3. Three references
4. A 500-word essay in Spanish in which applicant describes her/his reasons for wanting to pursue graduate work in Spanish
5. A audio tape in which the applicant introduces her/himself, describes a person she/he admires, or describes a trip she/he took in Spanish

*These admissions requirements apply only to the graduate certificate program in Hispanic Studies. Students interested in combining the certificate program with a master's degree from another department will have to meet all admission criteria for that degree.

Certificate Requirements:

I. 9 hour core (choose one from each category)

a.	SPN 500	Advanced Writing Techniques	(3)
b.	SPN 511	Topics in Spanish Civilization	(3)
	or		
	SPN 512	Topics in Spanish American Civilization	(3)*
c.	SPN 521	Studies in Spanish Literature	(3)
	or		
	SPN 522	Studies in Spanish American Literature	(3)*

*Students must choose at least one Spanish- and one Spanish-American related course from these two categories.

II. 9 hours of electives (choose three or more classes from this list)

No more than three hours of SPN 591(offered on a limited basis) and SPN 598 will be accepted for credit.

a.	SPN 501	Translation Techniques & Practices	(3)
b.	SPN 505	Conversation & Composition	(3)
c.	SPN 595	Seminar in Hispanic Studies (Topics will vary but will include Business Spanish, Linguistics, Film, Performance Spanish, Spanish for Professionals, and Second Language Acquisition) (May be repeated for up to 6 hrs.)	
d.	SPN 591	Directed Individual Study	(3)
e.	SPN 598	Internship	(3)

N.B. If a student has taken SPN 401 or SPN 405 at the undergraduate level, she/he must meet with the graduate director in order to be permitted to enroll in SPN 501 or SPN 505.

GRADUATE CERTIFICATE PROGRAM IN HISPANIC STUDIES
Course descriptions

SPN 500. Advanced Writing Techniques (3) Intensive work on an advanced level in specific areas of writing. Topics may include essay writing, technical writing, writing for publication in professional journals, and journalism.

SPN 501. (401) Translation Techniques & Practices (3) Translation of various kinds of texts and documents. Practical application of translation theory and development of strategies for solving predictable translation problems.

SPN 505. (405) Conversation & Composition (3) Emphasis on spoken Spanish and essay writing.

SPN 511. Topics in Spanish Civilization (3) Advanced study in geographical, historical, and cultural aspects of Spain. Topics will focus on specific time periods, geographic areas, or cultural phenomena. May be repeated under a different subtitle.

SPN 512. Topics in Spanish American Civilization (3) Advanced study in geographical, historical, and cultural aspects of Spanish America. Topics will focus on specific time periods, geographic areas, or cultural phenomena. May be repeated under a different subtitle

SPN 521. Studies in Spanish Literature (3) Study of representative Spanish authors, literary movements, and genres. May be repeated under a different subtitle.

SPN 522. Studies in Spanish American Literature (3) Study of representative Spanish American authors, literary movements, and genres. May be repeated under a different subtitle.

SPN 591. Directed Individual Study (1-3) Involves investigation under faculty supervision beyond what is offered in existing courses. May not exceed 3 hours.

SPN 595. Special Topics in Hispanic Studies (1-6) Advanced study of topics related to Hispanic literature, culture, linguistics, language, and/or foreign language pedagogy. Subtitles will vary from semester to semester.

SPN 598. Internship (3) A program of work and study conducted within an agency and/or setting that provides practical experience with observation and application of foreign language skills. May not be repeated.

ADDITIONAL GRADUATE COURSES

GTA 501. Graduate Teaching Assistant Workshop (2) Permission of instructor required. An introduction to the responsibilities of serving as a graduate teaching assistant or a teaching fellow. Topics for discussion include time management, student behavior, legal responsibilities, techniques of effective teaching, evaluation and use of technology in the classroom. To be graded with a "S" or "U."

DEPARTMENT OF COMPUTER SCIENCE

CSC 504. (MAT 504) Algorithmic and Applied Graph Theory (3) Prerequisite: CSC 233 or MAT 375 or consent of instructor. Algorithmic methods and their complexity in solving graph problems. Connectivity, matching, colorability, network flow, planarity, and other fundamental topics in graph theory. Practical applications of these methods to problems in social sciences, physical sciences, and computer science.

CSC 509. (MAT 509) Design and Analysis of Algorithms (3) Prerequisite: CSC 332. Theory of the design of efficient computer algorithms. Algorithms for sorting, searching, matrix operations, fast Fourier transforms, pattern matching, polynomial arithmetic and operations on graphs. Additional topics selected from NP–completeness, recursion, data structure selection and complexity.

CSC 515. (415) Artificial Intelligence (3) Prerequisite: CSC 332. Introduction to key concepts and applications of artificial intelligence. Knowledge representation; state space searching; heuristic search; expert systems. Biologically – inspired computing techniques such as neural networks, fuzzy logic and genetic algorithms. Implementation of concepts and techniques.

CSC 525. (425) (MAT 525/425) Numerical Analysis (3) Prerequisite: Undergraduate linear algebra, differential equations, and elementary numerical methods. Introduction to the theoretical foundations of numerical algorithms. Solution of linear systems by direct methods; least squares, minimax, and spline approximation; polynomial interpolation; numerical integration and differentiation; solution of nonlinear equations; initial value problems in ordinary differential equations; error analysis. Certain algorithms are selected for programming.

CSC 532. (432) Advanced Data Structures (3) Prerequisite: Undergraduate linear algebra and data structures. Advanced topics in data structures, with emphasis on algorithmic complexity. Recursive list manipulations; paradigms of search; bi–connectivity, strong connectivity, and precedence relations in graphs; pattern matching; search trees; methods for memory management and secondary storage; optimal techniques for sorting, merging, and selection.

CSC 575. Advanced Computer Graphics (3) Prerequisite: Undergraduate linear algebra, elementary numerical methods, data structures, and some prior familiarity with graphics. Brief review of two–dimensional graphics. Topics may include: approximation methods for curves, representations for solids, transformations, projections, hidden lines and surfaces, ray tracing, radiosity. Extensive programming required.

CSC 592. Topics in Computing (3) Prerequisite: Consent of instructor. Topics in computing of current interest not covered in existing courses.

ANTHROPOLOGY PROGRAM

ANT 500. (445) Ethnographic Research Methods (3) Ethnographic research methods and qualitative approaches. Topics covered include observation, focus groups, participant-observation, life

history, interviewing, qualitative analysis, research ethics, collaborative projects. Field research as basis for seminar paper.

DEPARTMENT OF SOCIOLOGY AND CRIMINAL JUSTICE

SOC 501/GRN 501. Aging and Society (3) Study of age as a structural feature of changing societies and groups, aging as a social process, and age as dimension of stratification. May be taken for elective credit in the MALS program.

SOC 518/GRN 518. (418) Women and Aging (3) Examines women's experiences of old age and the aging process. Specific emphasis on family, medical, and economic institutions. May be taken for elective credit in the MALS program.

DEPARTMENT OF PHILOSOPHY AND RELIGION

PAR 505. Bioethics and Aging (3) Examination of the principles and problems in the application of ethical theory to medical research and practice with emphasis on the special ethical problems of providing health care services to the aging population and involving elderly patients in medical research. May be taken for elective credit in the MALS program.

PAR 515. Ethical Issues in Research (3) Open only to graduate students. This course will address a wide range of ethical issues that arise in the conduct of research. Topics will include scientific misconduct and intellectual ownership; the protection of animals and human subjects; and the impact of research on society. Students will also explore ethical issues that arise in their specific disciplines.

PAR 591. Directed Independent Study (3) Open only to graduate students.

DEPARTMENT OF PHYSICS AND PHYSICAL OCEANOGRAPHY

PHY 575. (475) Physical Oceanography (3) Prerequisite: College physics and calculus. An introduction to the descriptive and dynamical features of ocean circulation. Topics include: the physical properties of seawater; oceanic heat budget; dynamics of ocean currents; descriptive oceanography; waves and tides.

PHY 576. (CHM 576) Chemical and Physical Analysis of Seawater (3) Prerequisite: Permission of instructor. Study of modern chemical and physical measurements of seawater including salinity, alkalinity, pH, nutrients, and dissolved oxygen. Several class periods may also be devoted to working aboard an oceanographic research vessel while at sea.

PHY 591. Directed Individual Study (1-3)

PHY 592. Special Topics (1-3) Prerequisite: Permission of instructor. May be repeated for credit with different topics.

SCIENCE COURSES

The following are interdisciplinary courses offered by various departments for those enrolled in the Master of Arts in Teaching (science).

SCI 501. Concepts in Natural Science I (1) An interdisciplinary survey of major science concepts examined in an inquiry format. Emphasis on laboratory based exploration and application of inter-

related biology, chemistry, earth sciences, and physical topics. Two lecture and three laboratory hours each week.

SCI 502. Concepts in Natural Science II (3) A continuation of SCI 501. An interdisciplinary survey of major science concepts examined in an inquiry format. Emphasis on laboratory-based exploration and application of interrelated biology, chemistry, earth sciences and physics topics. Two lecture and three laboratory hours each week.

The following are courses offered in the Department of Chemistry for students enrolled in the Master of Arts in Teaching (science) degree.

SCI 515. Fundamentals of Organic and Biological Chemistry (3) Prerequisite: CHM 101 and CHML 101 or SCI 501-502. A one-semester study of organic and biological chemistry. Topics include carboxylic acids, esters, amines, amids, carbohydrates, lipids, proteins, nucleic acids, nutrition, enzymes, hormones, neurotransmitters and intermediary metabolism.

SCIL 515. Laboratory for Fundamentals of Organic and Biological Chemistry (1) Corequisite: SCI 515. Introduction to equipment and techniques of organic and biological chemistry and interpretation of experimental results. Three laboratory hours each week.

SCI 555. Computer Applications and Chemical Literature (3) Prerequisite or corequisite: SCI 515. Microcomputer applications in chemistry, including an introduction to microcomputer design, peripherals, applications, communications, and instrument interfacing. Organization of the chemical literature search by traditional and computer methods, and data retrieval. No computer experience required.

SCI 577. Environmental Chemistry (3) Prerequisite: CHM 101-102 or equivalent. An introduction to current issues in environmental chemistry and their influence on future regulations and global policies. Topics include global warming, ozone depletion, acid rain, and toxicity of trace metals and organic pesticides.

SCIL 577. Environmental Chemistry Laboratory (1) Corequisite: SCI 577. Laboratory analysis of environmental samples, including applications of standard EPA methods.

CAMERON SCHOOL OF BUSINESS

MASTER OF BUSINESS ADMINISTRATION

The Cameron School of Business offers a program of study leading to a Master of Business Administration degree for qualified holders of a bachelor's degree from a regionally accredited college or university regardless of undergraduate field of study. The program's purpose is the development of the broadly educated professional manager who is prepared to meet the demands of the changing needs in the global environment.

Specific Objectives

- The program uses integrated learning methodology that parallels business practice for: preparation in the core functions of business include accountancy, economics, finance, marketing, business regulation and legal environment, information systems, organizational behavior, and production and operations management.
- Development of certain analytical and quantitative skills applicable to effective business decision-making.
- Formation of thought about current and future challenges facing business leaders with emphasis on communications, teamwork, organizational change, information technology, total quality, the international dimension of business, technological innovation, social responsibility and ethics.

Admission Requirements

Applicants seeking admission to the graduate program in business administration are required to submit the following to the Graduate School:

1. An application for graduate admission.
2. Official transcripts of all college work (undergraduate and graduate).
3. Official scores on the Graduate Management Admission Test (GMAT).
4. Three recommendations including one from an employer or supervisor who can comment on the applicant's work experience and potential for successful completion of a master's program.
5. Employment history form or resume.

A strong overall academic average based on upper division grade point average (last sixty credit hours), the GMAT score and at least one year of appropriate full-time work experience are minimum requirements for consideration for graduate admission. However, admission decisions are based upon several factors, and if other indicators of success are evident, individuals who fall below the established criteria in one of the areas may be considered for admission. Deadline for receipt of applications is March 1.

Degree Requirements

1. Forty-eight semester credit hours of approved graduate credit must be satisfactorily completed for the degree. Classes begin in Summer Session I and continue throughout the year (with appropriate breaks) until completion 24 months later. Students withdrawing from the program may not re-enter until the same time one year later.
2. The student must satisfy a minimal mathematics requirement in calculus. This requirement may be satisfied by completing MAT 151, its equivalent, or by passing the Advanced Placement Test (AP) in calculus. This must be completed prior to the first fall semester enrollment.
3. Each student must successfully complete an extensive written case analysis in MBA 556 and successfully pass an oral competency requirement through their presentation in MBA 553.
4. Each student must complete the approved course of study within five years of the date of first registration for graduate study.

Grading Policies

During the first 15 months of the program, the Learning Alliance Project work will count as 10% of your grade in applicable courses. Otherwise, Graduate School grading policies are adhered to.

Other Policies

All other policies adhered to by the Graduate School are withstanding in the MBA program.

Course Requirements for the Master of Business Administration Degree

All MBA students, regardless of undergraduate background, will be required to take the following program in the lockstep sequence:

A. Core Requirements (20 semester hours)

The following courses comprise the core of knowledge essential to an understanding of modern business and managerial practice.

MBA 550	Managerial Effectiveness	(2)
MBA 525	Micro Economics	(2)
MBA 551	Management Strategy	(2)
MBA 510	Statistical Methods for Business	(2)
MBA 512	Information Systems and Technology	(2)
MBA 511	Quantitative Methods	(2)
MBA 505	Financial Accounting	(2)
MBA 535	Corporate Financial Management	(2)
MBA 540	Marketing Decision Making I	(2)
MBA 560	Business Law	(2)

B. Professional Competence and Integrative Applications (22 semester hours)

In addition to the core requirements, the following courses develop depth and breadth of knowledge and provide analytical skills for practical application.

MBA 526	Macro Economics	(2)
MBA 552	Behavioral Management	(2)
MBA 506	Managerial Accounting	(2)
MBA 513	Information Analysis and Management	(2)
MBA 536	Investment Management	(2)
MBA 570	Operations Management	(2)
MBA 553	Learning Alliance Integration	(1)
MBA 554	Industry Practicum I	(1)
MBA 541	Marketing Decision Making II	(2)
MBA 555	Leading Organizational Change	(2)
MBA 556	Executive Challenge with CapSim	(2)
MBA 557	Industry Practicum II	(2)

C. Electives (six semester hours)

Candidates will strengthen their knowledge and sharpen their skills in particular areas by taking three courses from the elective areas: accountancy, economics, management, marketing, finance, operations management, information systems, and international business.

Master of Business Administration
Course Description

(The following MBA courses are open only to graduate students.)

MBA 550. Managerial Effectiveness (2) Course emphasizes the development and assessment of core management skills. Topics include problem solving, conflict resolution, communication, negotiation, team building, and delegation. An experiential approach requiring a high level of student involvement is used.

MBA 525. Micro Economics (2) Analysis of the cost structure faced by business firms and the structure of the output and resource markets in which they operate.

MBA 551. Management Strategy (2) An intensive course emphasizing the firm's choice of strategy, scope and organization. Major theoretical paradigms will be used to evaluate a firm's strategy and the determinants of competitive advantage. Topics include: strategic direction, macro and micro environmental analysis, corporate and business level strategies and implementation issues.

MBA 510. Statistical Methods for Business (2) A survey of statistical methods and techniques for the analysis of business data. Topics include descriptive and inferential statistical methods, statistical inference via hypothesis testing, probability theory, simple and multiple linear and nonlinear regression analysis.

MBA 512. Information Systems and Technology (2) The role of information systems and technology in business. Hardware, software, and communications issues are examined. Databases, enterprise resource planning systems, and other overarching applications are analyzed. Ethical issues of privacy and piracy are discussed.

MBA 511. Quantitative Methods (2) An introduction to quantitative models and methods for the solution of business problems. Topics include mathematical programming and its applications, simulation, queuing theory, decision analysis, forecasting, quality control, and project scheduling.

MBA 526. Macro Economics (2) Analysis of aggregate economic activity, the effects of fiscal and monetary policies and the global economic environment in which business firms operate. Course will also discuss international business strategies and the impact of culture on business decisions.

MBA 505. Financial Accounting (2) An intensive course in accounting principles with special emphasis on the concepts underlying income determination, preparation and interpretation of financial statements and the managerial uses of accounting information. Topics include transaction analysis, asset valuation, and expense and revenue recognition, capital structure and tools of financial analysis.

MBA 552. Behavioral Management (2) An intensive look at leadership, motivation, and communication within the organization. Emphasis on analyzing attitudes and perceptions, peer evaluations, and strategic HR looking at recruiting and staffing selection.

MBA 535. Corporate Financial Management (2) Examination of corporate decision-making process in finance. Evaluation of financial statements, capital budgeting concepts, capital structure decisions, and international financial issues for the businessperson.

MBA 540. Marketing Decision Making I (2) An introduction to the principles of marketing and basic marketing methods and tools needed to make effective marketing decisions. Lectures and projects regarding new product development, customer relationship management, and other key

marketing concepts will expose students to marketing principles and require them to formulate marketing tactics and strategies.

MBA 506. Managerial Accounting (2) Interpretation and use of accounting information in planning operations, controlling activities, and making decisions. There is extensive coverage of new concepts such as strategic cost analysis, balanced scorecard, JIT systems, value-added accounting, activity-based costing, process value analysis, quality, productivity, life-cycle cost management, and target costing.

MBA 513. Information Analysis and Management (2) Strategic and tactical issues of information systems and technology are addressed as they support and lead the operations of the organization. Models of the organization and its operations are designed. Multifaceted evaluations of organizational information systems are performed.

MBA 536. Investment Management (2) Valuation principles for stocks, bonds, and options. Technical and fundamental analysis, market efficiency, and risk management techniques are discussed.

MBA 570. Operations Management (2) Survey of the basic concepts, theories, and techniques for the management of operating systems. Development of concepts and decision processes critical to short-run and long-range organizational decision making. Topics include product and process design, operations planning, facility location and layout, inventory management, capacity planning, and scheduling.

MBA 560. Business Law (2) Examination of the constitutional, legislative, judicial, regulatory, and public policy forces exerted on the business environment. Particular focus on contracts, torts, and property law.

MBA 553. Learning Alliance Integration (1) Grading: Course grade for 1 credit hour and the final presentation will satisfy the oral competency requirement of the MBA program. Each team will present to an evaluation team composed of two faculty members, an alliance executive, and a CEN/outside executive (Note: Confidentiality agreement with partner may limit outside executive involvement). Presentations will be formal and videotaped.

MBA 554. Industry Practicum I (1) Students may choose an industry sector in which they gain intensive knowledge about issues and decisions affecting that sector. Lectures, executive speakers and the initiation of a year-long practicum constitute the course. Sector examples include: manufacturing industries or service industries; i.e., financial, health care, government, retail environment, etc.

MBA 541. Marketing Decision Making II (2) Covers strategic marketing planning process with special emphasis on the analysis needed to conduct a marketing audit. Course will also address the relationship of marketing with other functional areas of the firm.

MBA 555. Leading Organizational Change (2) The study of organizational change building on concepts that managers need to effectively lead the firm in various stages of the life cycle. Topics include: boundaryless organizations, drivers of change, leading edge technology, and entrepreneurship, the human resource, handling complexity, and management of shorter cycle times. Team coordinated, this course will make use of multiple field experts and practicing executives.

MBA 533. Special Topics (1-6) A series of topics providing depth in functional areas such as new product development, technology management, investment analysis, and strategic information systems.

MBA 556. Executive Challenge (2) Course provides a set of situations and issues that executives face as leaders of organizations. Each challenge will test the student's ability to identify the key factors, to incorporate the concepts presented in the MBA program, and to propose a course of action that will constructively address the challenge. Cases and/or simulation exercises will be incorporated to integrate business function areas.

MBA 557. Industry Practicum II (2) Students are required to develop a project that can be practiced utilizing all prior coursework and incorporating analysis begun in MBA 554.

MBA 591. Directed Individual Study (1-3) Directed individual study with approval of the MBA Director.

MASTER OF SCIENCE IN ACCOUNTANCY

The Cameron School of Business offers a program of study leading to a Master of Science in Accountancy to qualified holders of a bachelor's degree from a regionally accredited college or university regardless of undergraduate field of study. The curriculum is flexible. Students may concentrate in functional areas such as taxation/auditing or information systems/auditing. The purpose of the program is to prepare graduates to assume responsible accounting and managerial positions in public accounting, private industry, management consulting, government, and not-for-profit organizations.

Specific Objectives Include:

- Develop an advanced, clearly usable level of accounting knowledge and skills.
- Develop a further understanding of the skills required for effective communication, interpersonal relations, ethical standards, leadership, logical reasoning, analysis and problem-solving.
- Continue to provide quality instruction by well-qualified and experienced faculty.

Admission Requirements

Applicants seeking admission to the graduate program in accountancy are required to submit the following to the Graduate School:

1. An application for graduate admission
2. Official transcripts of all college work (undergraduate and graduate)
3. Official scores on the Graduate Management Admission Test (GMAT). Scores more than five years old will not be accepted.
4. Three recommendations by individuals who can comment on the applicant's potential for successful completion of a master's program.

Applicants should have a strong overall undergraduate academic record and have earned satisfactory scores on the GMAT. However, admission decisions are based on several factors and other indicators of success may be considered for admission.

Persons entering the program must have completed a basic core of accounting coursework prior to admission. Four of the core courses may be completed in residence at UNCW during the summer prior to admission to the MSA program. The additional core requirement may be completed during the first semester in residence in the MSA program. Specifically, successful completion of the following undergraduate accounting courses is required: Intermediate Financial Accounting (six hours); Accounting Information Systems: Control and Audit (three hours); Survey of Tax (three hours); Advanced Managerial Accounting and Database Systems (three hours). Prerequisite courses from institutions other than UNCW must be approved by the MSA director.

The deadline for receipt of applications is April 1. Applicants are encouraged to apply early because admission is competitive and decisions are made on a rolling basis.

Interested applicants will be considered for a graduate assistantship which will be awarded on a competitive basis as they become available.

Degree Requirements

1. A minimum of 30 semester hours of graduate coursework approved by the MSA director is required for the Master of Science in Accountancy. This must include a required core of 19.5 semester hours of MSA graduate accounting and business courses.
2. Each student must complete 7.5 semester hours of MSA graduate coursework in a specialization of either tax/auditing or information systems/auditing approved by the MSA director.
3. Each student must complete 3 semester hours of MSA graduate electives approved by the MSA director.
4. Up to six hours of graduate study may be accepted as transfer credit from an accredited college or university. Requests for transfer credit must be approved by the MSA direc-

tor and the Graduate School. A minimum of 24 semester hours of graduate study must be completed in residence.

5. Each student must successfully complete a written and oral comprehensive case analysis in the final semester of enrollment in coursework.
6. Each student must complete the approved course of study within five years of the date of first registration for graduate study.

Required Courses

All Master of Science in Accountancy majors will be required to complete the following core courses and choose one of the concentration paths.

MSA 500	Financial Accounting Research and Theory	(3)
MSA 504	Federal Tax Research	(1.5)
MSA 508	Taxation and Business Decisions	(1.5)
MSA 512	Auditing Concepts	(1.5)
MSA 522	Business Database Systems	(1.5)
MSA 539	Corporate Financial Management	(1.5)
MSA 540	Investment Management	(1.5)
MSA 518	Seminar in Audit Practice	(1.5)
MSA 515	International Management and Strategy	(1.5)
MSA 530	Management Decisions and Control	(1.5)
MSA 527	Marketing Professional Services	(3)

Concentration: Audit/Tax

MSA 505	Corporate and Partnership Taxation	(1.5)
MSA 510	Tax Planning Techniques	(1.5)
MSA 506	Estate Planning	(1.5)
MSA 534	Accounting Practicum: Tax/Audit	(3)

Or

Concentration: Audit/Information Systems

MSA 524	Information Systems Analysis and Design	(3)
MSA 516	Systems Assurance	(1.5)
MSA 535	Accounting Practicum: Information Systems	(3)

Elective courses

Students will strengthen and broaden their skills in particular areas by taking three (3) hours of elective MSA graduate courses from financial accounting, business law, non-profit accounting and ethics. Each student's elective courses must be approved by the MSA director.

GRADUATE COURSES IN THE MASTER OF SCIENCE IN ACCOUNTANCY PROGRAM

MSA 500. Financial Accounting Research and Theory (3) Explores the evolution of accounting theory and practice and the interaction of theory, research, and practice in setting financial accounting standards. Students will learn to use the research techniques, analytical skills, professional judgment, and communication skills needed by professional accountants to apply FASB, AICPA, and SEC accounting and auditing pronouncements.

MSA 503. Current Topics in Nonprofit Organization Accounting (1-3) A survey of the accounting and financial reporting practices of government and other types of nonprofit organizations, and a critical review of contemporary issues concerning changes to existing government and nonprofit accounting and financial reporting methods.

MSA 504. Federal Tax Research (1-3) Tax research techniques applicable to federal tax laws in regard to individual, corporate and partnership taxpayers. Use of traditional and computerized tax services in the solution and reporting of tax cases.

MSA 505. Corporate and Partnership Taxation (1-3) The study of corporate and partnership taxation. Emphasis is on corporation and partnership organization, operations, distributions, liquidation, and reorganization utilizing tax research techniques and databases.

MSA 506. Estate Planning (1-3) An examination of wealth transfer taxes and income taxation of estates and trusts. The course further looks at the integration of these taxes and the planning opportunities available to minimize tax liabilities.

MSA 508. Taxation and Business Decisions (1-3) The accounting and managerial effects of taxation upon decisions, policies, and procedures in the planning, organization, and operation of a business enterprise. Areas covered include the taxing process; taxation of individuals, corporations and fiduciaries; investment incentives; capital gains and losses; tax shelters; and tax planning. Problems and case analysis are used.

MSA 510. Tax Planning Techniques (1-3) This course explores the opportunities for tax planning presented in selected areas of federal tax law. Techniques examined include income shifting, business planning strategies, tax deferral techniques, and wealth transfer opportunities. Areas of federal tax law covered may include individual income taxation (including deferred compensation), corporate and partnership taxation, and federal estate and gift taxation.

MSA 512. Auditing concepts (1-3) Study of the objectives, standards, procedures and reporting requirements associated with a public accountant's role in auditing financial statements and performing assurance engagements. Students will learn how to make client acceptance decisions, plan and conduct audits and generate appropriate report(s) in light of competitive, legal and ethical constraints.

MSA 514. Ethics and Professionalism in Accounting (1-3) An integrative course that examines the issues of professionalism and ethics in the accounting profession as well as corporate social responsibility. The course will focus on ethical decision-making in business situations and professional responsibilities of accountants.

MSA 515. International Management and Strategy (1-3) Explores how managers in firms are affected by key environment factors, such as politics, culture, economics and geography, etc. It studies strategies for resolving the differences and challenges posed by international business opportunities and competition.

MSA 516. Systems Assurance (1-3) Study of systems issues in today's technological environment with an emphasis on auditing an EDP system. Includes a study of auditor control risk; organization, documentation, hardware and software control; auditing computer programs, computer files, computer processing; and auditing third party and expert systems.

MSA 517. Human Resource Management (1-3) A survey of the relationship between management of human resources and the effective management of the firm. Topics covered include staffing, performance appraisal, compensation systems, discipline, due process, motivation, team development and effectively managing meetings.

MSA 518. Seminar in Audit Practice (1-3) Selected areas of auditing including analytical procedures, statistical sampling, internal control, internal auditing, auditor reports, and other attestations. Emphasis on directed readings, case studies, individual research and special reports.

MSA 520. International Accounting (1-3) A survey of international accounting topics including comparative accounting systems and practices, internal accounting standards, analyzing foreign financial statements, and transfer pricing.

MSA 521. Current Trends in Communication and Technology (1-3) Current and emerging issues in communications and technology that affect or are affected by business. Hardware and software issues concerning end-user computing are explored. Communications technology and software for accessing information beyond the organization's boundaries are stressed.

MSA 522. Business Database Systems (1-3) Major database structures are presented and discussed. The relational database structure is stressed. Conceptual foundations, such as normalization, are integral to the course. Students are required to become competent users of major database management features: report generation, development of input forms that maintain integrity, and queries.

MSA 524. Information Systems Analysis and Design (3) Prerequisite: Computer programming course approved by MSA coordinator. A study of concepts and techniques related to the systems development life cycle, structured systems analysis and design techniques, and rapid application development with particular focus on accounting information systems.

MSA 525. Marketing Management (1-3) Examining major factors considered in the analysis, development, and control of marketing programs. Attention is directed to decisions concerning service offerings, pricing strategy, promotional methods, and the channels of distribution. Emphasis is placed on the role marketing plays in the management and decision-making of the firm.

MSA 526. Advanced Financial Accounting (1-3) Advanced study of the principles and theory underlying the preparation of financial statements. Topics include pensions, leases, segment and interim reporting, foreign currency translations, bankruptcy, and partnership accounting and reporting.

MSA 527. Marketing Professional Services (1-3) An in-depth exploration of the marketing of professional services, highlighting the distinctions which exist in the marketing of intangibles. In addition, the managerial implications of these distinctions and strategies available to overcome the difficulties associated with the marketing of services are examined.

MSA 528. Mergers and Acquisitions (1-3) The study of corporate mergers and acquisitions and the related accounting issues. Topics include acquisition accounting under purchase and pooling of interest methods and preparation of consolidated financial statements in parent/subsidiary relationships. Current mergers and acquisitions are also studied.

MSA 530. Management Decisions and Control (1-3) Advanced theoretical and applied analysis of financial information systems for management planning and control. Topics include management control systems, strategic cost analysis, activity-based cost management and budgeting systems.

MSA 534. Accounting Practicum: Tax/Audit (3) A capstone course that examines the current issues facing the accounting profession including financial reporting, management accounting and control, information systems, and professional certification topics. The course includes a comprehensive project with a required professional presentation to faculty and business leaders.

MSA 535. Accounting Practicum: Information Systems (3) Prerequisite. MSA 524. A study and application of concepts related to application software development in a networked environment. The course includes a comprehensive project involving the development and implementation of a fully-tested information system.

MSA 539. Corporate Financial Management (1-3) Examination of corporate decision-making process using cases to emphasize application of theory. Evaluation of balance sheet, income statement, cash flow statement and statement of stockholder's equity for purpose of controlling and financing growth.

MSA 540. Investment Management (1-3) Examination of investor decision-making process using cases to emphasize application of theory. Evaluation of pricing of various capital market instruments including derivative securities and convertible securities. Fundamentals of constructing efficient portfolios and writing investment policy statements for both individual and institutional investors.

MSA 560. Legal Environment and Business Regulation (3) A study of the management process and how it is influenced by the constitutional, legislative, judicial, regulatory, administrative, and social forces exerted on the business and social environment.

MSA 562. Business Law for Accountants (1-3) This course is designed for students who have not taken undergraduate Business Law courses. Topics covered will include an overview of Tort Law, Contract Law, Property Law, Business Organizations, UCC Law, Secured Transactions, Commercial Paper, and Bankruptcy.

MSA 564. Seminar in Accountant's Legal Liability (1-3) Discussion of common liability theories used against the accounting profession. Theories include: breach of contract, negligence, fraud, and securities liability under the 1933 and 1934 Securities Acts. Expert witness liability, liability to third party users of financial statements and how noncompliance of GAAP and GAAS affect liability are also covered.

MSA 566. Environmental Law (1-3) This course will examine the purposes, methodology and effects of the law as it relates to environmental issues such as water and air pollution, toxins and land use. Topics will include current affairs, common law rights and remedies, the current legislative and regulatory framework and market-based approaches.

MSA 591. Directed Individual Study (1-3) Prerequisite: Consent of the MSA director or MBA director.

MSA 592. Topics in Accounting (1-3) Prerequisite: Consent of instructor. Study of topics or issues not covered in existing courses.

WATSON SCHOOL OF EDUCATION

The Donald R. Watson School of Education offers master's degree programs in professional education in the following areas: (1) Master of Education (M.Ed.) program with specializations in curriculum/instruction supervision, elementary education, middle grades education, language and literacy education, secondary education, and special education, (2) Master of School Administration (M.S.A.), (3) Master of Science (M.S.) in Instructional Technology, and (4) Master of Arts in Teaching program in secondary education with options in English, history, mathematics, and science. The M.S., M.A.T., and M.Ed. programs meet the requirements for North Carolina Masters/Advanced Competencies.

Coursework in Reading Recovery™ is available to students meeting specific admissions criteria, including holding a master's degree in reading or closely related area, at least five years of teaching experience, and having the nomination of a school district or consortium that has filed application to become a Reading Recovery™ site. Persons successfully earning certification are qualified and approved by the National Diffusion Network to serve as teacher leaders for the Reading Recovery™ programmed within public school systems. For additional information and requirements, contact the Department of Curricular Studies in the Watson School of Education.

MASTER OF EDUCATION

Admission Requirements

Applicants seeking admission to the (M.Ed.) graduate program are required to submit the following to the Graduate School:

1. An application for graduate admission
2. Official copies of transcripts of all college work (undergraduate and graduate)
3. Official scores on the Miller Analogies Test
4. Three recommendations by individuals in relevant professional fields

A score of 40 on the Miller Analogies Test and a grade average of "B" in the undergraduate major are minimum requirements for graduate admission. However, admissions decisions are based upon several factors and where other indicators of success warrant, individuals who fall below the established criteria in one of the areas may be considered for admission.

In addition to the general requirements, applicants to the program in elementary education are required to hold, or be qualified to hold, North Carolina Class "A" teacher licensure in early childhood education, intermediate education, or elementary education. Applicants to the program in middle grades education are required to hold, or be qualified to hold, North Carolina Class "A" teacher licensure in middle grades education. Applicants to the program in special education are required to hold, or be qualified to hold, North Carolina Class "A" special education teacher licensure in at least one area of exceptionality and are required to have taken at least one course in mental retardation, one course in learning disabilities, and one course in emotional disturbance. Applicants to the language and literacy program are required to hold, or be qualified to hold, North Carolina Class "A" elementary, middle grades, special education or secondary teacher licensure. Applicants to the curriculum /instruction supervision program must hold, or be qualified to hold North Carolina class "A" teacher licensure in the area of curricular emphasis. Applicants to the secondary education program are required to hold, or be qualified to hold, North Carolina Class "A" teacher licensure in English, history, mathematics, or science at the secondary level.

Under exceptional circumstances, individuals who do not hold the specified teaching credential may be admitted. Such exceptions may be made in cases of otherwise qualified applicants who are engaged in relevant professional roles not requiring teacher certification and who may profit professionally from the type of advanced study offered at this institution. Examples of applicants for whom exceptions are appropriate include community college administrators and

teachers. In such instances, the programs may be modified appropriately. However, upon completion of the graduate program individuals admitted under such exceptions are not qualified for the institution's recommendation for North Carolina Board of Education instructional or administrative licensure.

Students who seek professional improvement or licensure renewal but do not intend to pursue a degree may register for graduate courses through procedures established for non–degree students. Those procedures are described in an earlier section of this catalogue. (NOTE: Licensure requirements change, and requirements must be adjusted to accommodate new mandated competencies and guidelines. Students should check with their advisors or the dean's office to keep informed of changes.)

Degree Requirements for Master of Education (M.Ed.) Programs

Curriculum/Instruction Supervision

The program leading to the Master of Education degree (M.Ed.) in curriculum/instruction supervision provides advanced professional training for individuals holding, or qualified to hold, North Carolina Class "A" teacher licensure in an academic area. The program is designed to provide advanced study to prepare graduates to be effective school and district level curriculum and instructional leaders, and is appropriate for classroom teachers, building administrators, teacher educators, and other personnel who play a supervisory role in the professional development of others.

Based upon the view of the professional as a decision-maker and reflective practitioner, the program addresses the needs for conceptual and procedural bases for decision-making and specific alternatives within the student's anticipated area of professional practice. The 36-semester hour program consists of a set of core courses that are common with the school administration program, courses specific to a curriculum specialization area, and courses within the supervision program track. The PRAXIS Examination, specialty area, is required for licensure.

I. Curriculum/Supervision Core (12 hours)

EDN 523	Research in Education	(3)
EDN 564	Policy Formulation as a Systemic Process	(3)
EDN 566	Schools as Socio-Technical System	(3)
EDN 568	Educational Program Design and Evaluation	(3)

II. Curriculum Supervision Program Track (9 hours)

EDN 520	Instructional Development	(3)
EDN 567	Learning-Centered Supervision	(3)
EDN 578	Practicum in Learning-Centered Supervision	(3)

III. Program Specialization (6 hours)

EDN 530	Curriculum	(3)
Select an additional course, in consultation with the advisor, from one of the following focus areas: Birth / Kindergarten, Elementary, Middle, Secondary, or Special Education.		(3)

IV. Electives (3 hours)

EDN 509	Education in a Multicultural Context	(3)
SED 556	Collaboration and Teaming Strategies for Special Educators	(3)
EDN 562	Introduction to Administrative Applications of Technology	(2)
EDN 595	Special Topics in Education	(3)

V. Thesis (6 hours)

EDN 599	Thesis in Education	(6)

A preliminary examination and portfolio will be required.

Elementary Education

The program leading to the Master of Education degree (M.Ed.) in elementary education provides advanced professional training for individuals holding, or qualified to hold, North Carolina Class "A" teacher licensure in early childhood education (K-4), intermediate education (4-6), or elementary education (K-6). The 39-semester hour program is comprised of 18 semester hours of conceptual and technical studies, 12 semester hours in the area of specialization, a 3-semester hour practicum, and 6 semester hours of electives.

Based upon the view of the professional as a decision-maker and reflective practitioner, the program addresses the needs for conceptual and procedural bases for decision-making and specific alternatives within the student's anticipated area of professional practice. Accordingly, the program is comprised of a "professional core" of conceptual foundations, elementary specialty courses, and a practicum. The PRAXIS Examination, specialty area, is required for licensure.

I. Elementary Core (18 hours)

Choose one course from each area:

A.	EDN 500	Human Development and Learning	(3)
B.	EDN 523	Research in Education	(3)
C.	EDN 509	Education in a Multicultural Context	(3)
	EDN 545	Black Literature and Resources for Teachers	(3)
	EDN 563	Educational Environments	(3)
D.	EDN 520	Instructional Development	(3)
	EDN 530	Curriculum	(3)
E.	SED 558	Issues and Trends in Special Education	(2)
	EDN 550	Nature and Needs of Exceptional Children	(3)
F.	SED 556	Collaboration and Teaming Strategies for Special Educators	(3)
	EDN 567	Learning-Centered Supervision	(3)
G.	EDN 593	Contemporary Issues in Education	(1)

II. Elementary Specialty Courses (12 hours)

Choose one course from each group:

Mathematics

EDN 542	The Teaching of Mathematics	(3)
EDN 546	Assessment in School Mathematics	(3)

Language Arts

EDN 541	Role of Literature in Learning and the Curriculum	(3)
EDN 551	Exploring Your Own Literacy and Literacy Education	(3)
EDN 558	Language and Literacy Foundations*	(3)
EDN 584	Development of Language and Literacy*	(3)
EDN 586	Program Practices and Procedures in Language and Literacy*	(3)
EDN 588	Assessment in Language and Literacy	(3)

Social Studies

EDN 543	The Teaching of Social Studies	(3)

Science

EDN 544	The Teaching of Science	(3)
EDN 548	Inquiry – The Method of Science	(3)

*Although the one semester hour co-requisite seminars (EDN 569, 585, and 587) are not required for Elementary Education majors, they will enrich the learning experiences for students electing to take them.

III. Practicum (3 hours)

EDN 590	Practicum in Elementary Education	(3)

IV. Electives (6 hours)

Six semester hours of graduate courses appropriate to elementary education as approved by the advisor.

EDN 599	Thesis in Education may be selected	(1-6)

Competence in appropriate inquiry procedures will be developed through the required course, EDN 523: Research in Education, and other projects required in various courses. A written comprehensive examination will be required.

Language and Literacy Education

The program leading to the Master of Education degree (M.Ed.) in language and literacy education provides advanced professional training for individuals holding, or qualified to hold, North Carolina Class "A" teacher licensure. The 39-semester hour program is comprised of 6 semester hours of core requirements, 27 semester hours in the specialization, and 6 semester hours of electives.

Based upon the view of the professional as decision-maker and reflective practitioner, the program addresses the needs for conceptual and procedural bases for decision-making, for specific practices, and for structured reflection. The PRAXIS Examination, specialty area, is required for licensure.

I. Core Requirements (6 hours)

EDN 523	Research in Education	(3)
Choice of one of the following:		
SED 558	Issues and Trends in Special Education	(2)
EDN 509	Education in a Multicultural Context	(3)
SED 556	Collaboration and Teaming Strategies for Special Educators	(3)
EDN 566	School as a Socio-Technical System	(3)

II. Language and Literacy Specialty (27 hours)

EDN 538	The Teaching of Writing and Other Forms of Representation	(3)
EDN 541	Role of Literature in Learning and the Curriculum	(3)
EDN 551	Exploring Your Own Literacy and Literacy Education	(3)
EDN 558	Language and Literacy Foundations	(3)
EDN 569	Seminar in Language and Literacy Foundations (co-requisite EDN 558)	(1)
EDN 584	Development of Language and Literacy	(3)
EDN 585	Seminar in Development of Language and Literacy (co-requisite EDN 584)	(1)
EDN 586	Program Practices and Procedures In Language and Literacy	(3)
EDN 587	Seminar in Program Practices and Procedures in Language and Literacy (co-requisite EDN 586)	(1)
EDN 588	Assessment in Language and Literacy	(3)
EDN 589	Tutoring for Literacy Development	(3)

III. Electives (6 hours)

Six hours of electives appropriate to language and literacy education as approved by advisor.

Competence in appropriate inquiry procedures will be developed in the required course, EDN 523: Research in Education. Students are required to complete an action research project and an educational change project, and to prepare and present a portfolio representative of their learning prior to the completion of the program. A written comprehensive examination will be required.

Students qualify for a recommendation for graduate level licensure in reading by completing the Master of Education Program in Language and Literacy and by passing the appropriate special area PRAXIS Examination. Individuals who hold a master's degree in education in a related area may qualify to be recommended for graduate level licensure in reading by completing 18 additional hours of approved course work. The individual must complete a minimum of twelve hours of work at UNCW and must pass the appropriate specialty area PRAXIS examination.

Middle Grades Education

The program leading to the Master of Education degree (M.Ed.) in middle grades education provides advanced professional training for individuals holding, or qualified to hold, North Carolina Class "A" teacher licensure in one or more areas of middle school education. The 37-semester hour program is divided into five areas: 9 semester hours of core courses, 3 semester hours of leadership skills, 9 semester hours of content specialty, 10 semester hours of program emphasis courses, and 6 hours of electives.

Based upon the view of the professional as a decision-maker and reflective practitioner, the program addresses the needs for conceptual and procedural bases for decision-making and specific alternatives within the student's anticipated area of professional practice. The PRAXIS Examination, specialty area, is required for licensure.

I. Middle Grades Core (9 hours)

EDN 500	Human Growth and Development	(3)
EDN 523	Research in Education	(3)
EDN 530	Curriculum	(3)

II. Leadership Skills (3 hours)

Choose one of the following courses:

EDN 509	Education in a Multicultural Context	(3)
SED 556	Collaboration and Teaming Strategies for Special Educators	(3)
EDN 567	Learning-Centered Supervision	(3)

III. Content Specialty (9 hours)

Nine or more hours from one content area usually taught in middle schools (Language Arts, Mathematics, Science, or Social Studies). Courses may be selected from graduate offerings in the departments of Biology, Chemistry, Earth Sciences, English, History, and Mathematics and Statistics for which the student has met the prerequisites.

IV. Program Emphasis (10 hours)

EDN 549	Middle School Education	(3)
EDN 577	Practicum in Middle Grades Education	(3)
EDN 593	Contemporary Perspectives in Education	(1)

A minimum of one additional education graduate course appropriate to the discipline in which the student has licensure.

V. Electives (6 hours)

Six semester hours appropriate to middle grades education as approved by the advisor .

EDN 599	Thesis in Education may be selected	(1-6)

Competence in appropriate inquiry procedures will be developed through the required course, EDN 523: Research in Education, and other projects required in various courses. A written comprehensive examination will be required.

Graduate licensure in an additional content area may be obtained by completing part III and the appropriate graduate methods course in the academic discipline. The appropriate PRAXIS examination specialty area test also will be required.

Secondary Education

The program leading to the Master of Education degree (M.Ed.) in secondary education provides advanced academic and professional study for individuals holding, or qualified to hold, North Carolina Class "A" secondary teacher licensure in one of the academic specialty fields included in the program. The 39-semester hour program is comprised of a core of professional studies designed to enhance the instructional decision-making skills of secondary teachers and a specialization track designed to enhance knowledge of subject matter, structure of the disciplines, and appropriate modes of inquiry. The M.Ed. in Secondary Education is offered in the following specialties: English, history, mathematics, and science.

Based upon the view of the professional as a decision-maker and reflective practitioner, the program requires 18 semester hours of professional education courses, and 21 semester hours in the academic specialization. The PRAXIS Examination, specialty area, is required for licensure.

I. Professional Core (18 hours)

EDN 506	Advanced Methods of Secondary Instruction	(3)
EDN 520	Instructional Development	(3)
EDN 523	Research in Education	(3)
EDN 528	Secondary School Organization	(3)
EDN 565	Applied Research Practicum in Secondary Schools	(3)
EDN 579	Instructional Leadership in Secondary Schools	(3)

II. Academic Specialization (21 hours) Courses must be approved by advisor.

A. English

21 semester hours are required including:

ENG 501	Introduction to Research Methods	(3)
ENG 502	Introduction to Literary Theory	(3)

In addition, students selecting the literature focus must select at least two courses in the study of literature which may include EDN 545: Black Literature and Resources for Teachers and other appropriate courses which develop multicultural awareness. Students may utilize the remaining nine semester hours to extend one or more of the following areas of interest: linguistics, writing, or literature.

Students selecting the critical literacy focus are required to complete

ENG 552	Rhetoric and Culture	(3)
ENG 554	Theories and Practices of Critical Literacy	(3)

Students should select fifteen hours of additional courses which enhance pedagogical development and disciplinary content knowledge.

B. History

21 semester hours are required including:

HST 500 Historiography (3)

In addition, one course each in United States, European, and Global history, and nine hours of graduate electives in history or other social studies disciplines are required.

C. Mathematics

21 semester hours are required.

Students select 21 hours including:

MAT 511-512 Real Analysis I, II (3-3)

MAT 541-542 Modern Algebra I, II (3-3)

D. Science

21 semester hours are required. Students will select 21 hours of graduate science coursework based upon previous academic preparation.

Competence in appropriate inquiry procedures will be developed through the required course, EDN 523: Research in Education, and other projects required in various courses. Culminating requirements include submission of a performance portfolio and an oral defense.

Special Education

The program leading to the Master of Education (M.Ed.) in special education provides advanced professional training for individuals holding, or qualified to hold, a North Carolina Class "A" teacher licensure in exceptional children in at least one area of exceptionality. The program is cross-categorical in nature with emphasis in three areas of mild exceptionalities: mental retardation, learning disabilities, and behaviorally/ emotionally handicapped. The 39-semester hour program is comprised of 16 semester hours of core courses and 23 hours in the concentration including a practicum.

Based upon the view of the professional as a decision-maker and reflective practitioner, the program addresses the needs for conceptual and procedural bases for decision-making and for specific alternatives within the student's anticipated areas of professional practice. Accordingly, the program is comprised of a "professional core" treating essential conceptual foundations and general technologies, and a concentration in special education. The PRAXIS Examination, specialty area, is required for licensure.

I. Special Education Core (16 hours)

SED 502	Foundations of Special Education	(1)
SED 503	Exceptional Child Development	(3)
EDN 509	Education in a Multicultural Context	(3)
EDN 523	Research in Education	(3)
EDN 530	Curriculum	(3)
SED 557	Technology Applications in Special Education	(3)

II. Special Education Concentration (Cross-Categorical Track) (23 hours)

SED 551	Advanced Pedagogy in Special Education	(3)
SED 553	Behavior Management within Programs for Mildly Handicapped Students	(3)
SED 556	Collaboration and Teaming Strategies for Special Educators	(3)
EDN 568	Educational Program Design and Evaluation	(3)
SED 558	Issues and Trends in Special Education	(2)
EDN xxx	One course in General Education selected from designated list of courses and approved by advisor	(3)

SED 559	Practicum in Special Education	(3)
SED 598	Portfolio Development in Special Education	(3)
	or	
EDN 599	Thesis in Education	(3)

Competence in appropriate inquiry procedures will be developed through the required course, EDN 523: Research in Education. A comprehensive examination will be required.

Students who are accepted provisionally (without at least one course in mental retardation, one course in learning disabilities, and one course in emotional disturbance) must complete these courses before receiving the master's degree.

MASTER OF SCIENCE IN INSTRUCTIONAL TECHNOLOGY

Admission Requirements

Application for admission is made by submitting application materials to the Graduate School at the University of North Carolina at Wilmington and Watson School of Education, Department of Specialty Studies.

The following materials should be submitted to the Graduate School Admission Office:

1. Graduate School Application.
2. Official transcripts from all universities attended.
3. Three recommendations by individuals in relevant professional fields.
4. MAT or GRE scores.
5. International students: TOEFL score of 550 or higher.

The following material should be submitted to the Department of Specialty Studies:

1. Letter of application describing applicant's educational and professional experiences, his/her reasons for pursuing a master's degree in instructional technology, and the contributions that the applicant hopes to make after completing the degree.
2. A completed "Statement of Professional Goals" form.

A satisfactory score on the Miller Analogies Test or the verbal, quantitative and analytical portions of the Graduate Record Examination and an undergraduate grade point average of 3.0 are expected for admission. However, admissions decisions are based upon several factors, and where other factors of success warrant, individuals who fall below the established criterion in one of the areas may be considered for admission.

Degree Requirements

The Master of Science degree program in instructional technology requires a minimum of 36 semester hours beyond the baccalaureate degree. The program will be comprised of: (1) a required set of core courses of 15 semester hours; (2) 15 semester hours of focus area courses; (3) a minimum of three semester hours of thesis or portfolio; and (4) three semester hours of internship.

The Master of Science degree in applied information technology is specifically designed to allow students, in consultation with their faculty advisors, to tailor a program of study specifically to their own personal or career needs. Each student's program of study will be carefully designed to meet appropriate educational objectives. The option of taking at least six semester hours of course work outside the instructional technology discipline is consistent with a multidisciplinary view of the field.

I. Core Courses (15 hours)

MIT 500	Instructional Systems Design: Theory and Research	(3)
MIT 510	Design and Development of Instructional Technology	(3)
MIT 511	Multimedia Design and Development	(3)
MIT 520	Managing Instructional Development	(3)
MIT 530	Evaluation and Change in the Instructional Development Process	(3)

II. Focus Courses (15 hours)

MIT 501	Motivation in Instructional Design	(3)
MIT 502	The Systemic Approach to Performance Improvement	(3)
MIT 512	Computer Applications in Education	(3)
MIT 513	Computer-Based Instruction	(3)

MIT 514	Distance Education	(3)
MIT 521	Diffusion and Implementation of Educational Innovations	(3)
MIT 522	Organization and Management of Instructional Technology Programs	(3)
MIT 531	Assessment of Learning Outcomes	(3)

III. Internship/Colloquium (3 hours)

MIT 540	Colloquium I	(1)
MIT 541	Colloquium II	(1)
MIT 542	Internship	(1)

IV. Thesis or Portfolio (3 hours)

MIT 599	Thesis	(3)
or		
MIT 598	Portfolio Development	(3)

MASTER OF SCHOOL ADMINISTRATION

The program in educational leadership is a two-year course of academic study and structured professional field experiences comprising 44 semester hours. (Students needing to master technology competencies through structured coursework will take EDN 562 which adds two credit hours to the total required for program completion.) Based on an image of a school as a community where the needs of learners are paramount, where learning is cherished, diversity celebrated, vision shared, and leadership toward worthy and common goals is drawn from all members, the program seeks students who exemplify the intellectual, academic, professional, and personal attributes essential to nurturing such an environment for learners and workers.

Admission Requirements

Students will be admitted to the educational leadership program at the beginning of the fall semester each year. All application materials should be submitted by February 15 in order to be considered for fall entry into the program.

Applicants are required to submit the following materials to the Graduate School:

1. An application for graduate admission.
2. Official transcripts of all college work (undergraduate and graduate)
3. Official scores on the verbal, quantitative, and analytical portions of the Graduate Record Exam or the Miller Analogies Test
4. Three recommendations by individuals in professionally relevant roles
5. A brief (2-3 page typed, double-spaced) letter of application which includes a description of goals and interests in pursing graduate study
6. A brief (2-3 page typed, double-spaced) autobiographical statement which outlines the applicant's: (a) relevant professional experiences, (b) how these experiences relate to the desire to become a school administrator, (c) goals as an administrator, and (d) philosophy of education

A satisfactory score on the Miller Analogies Test or the verbal, quantitative, and analytical portions of the Graduate Record Examination and an undergraduate grade point average of 3.0 are expected for admission. However, admissions decisions are based upon several factors, and where other indicators of success warrant, individuals who fall below the established criterion in one of the areas may be considered for admission. In addition, applicants must hold, or be qualified to hold, North Carolina Class "A" teacher licensure and must have served successfully as a teacher for a minimum of three years at the elementary, middle grades, or secondary level. The admissions procedure will also include an interview with a committee of Watson School of Education faculty and public school personnel. Final selection will be based upon consideration of test scores, academic record, writing samples, recommendations, and interview performances.

The educational leadership program of the University of North Carolina at Wilmington is authorized by the Principal Fellows Commission to serve students selected to the North Carolina Principal Fellows Program. Open to United States citizens who are residents of North Carolina and meet rigorous academic and experiential requirements, the Principal Fellows program provides two-year scholarship loans in the amount of $20,000 annually to students who enroll in and complete a full-time two-year master's program in school administration at one of the selected North Carolina institutions. The scholarship loans will be forgiven if the graduate serves as a full-time school administrator in North Carolina for four years during the six years following program completion. Selection as a Principal Fellow and admission to the Graduate School of the University of North Carolina at Wilmington are two separate procedures, but admission to an approved university program is a criterion for selection as a Fellow. For application materials for the Principal Fellows Program, call (919)962-4575 or write:

Principals Fellows Program
The University of North Carolina
General Administration
P.O. Box 2688
Chapel Hill, NC 27515-2688

Degree Requirements

Students selected to the Master of School Administration program will proceed as a cohort through an interdisciplinary program comprised of 44 semester hours, including academic study as well as field-based inquiry and practice. The program leading to the Master of School Administration (M.S.A.) provides advanced professional training for individuals holding, or qualified to hold, North Carolina Class "A" teacher licensure in at least one area of education. The program is comprised of conceptual and programmatic studies, practica and internship, and a thesis/non-thesis option. Courses may be taken on a full or part-time basis. Full-time students are expected to assist with the instruction of EDNL 200: Field Studies. The program of study for full-time enrollment is listed below.

Based upon the view of the professional as a decision-maker and reflective practitioner, the program addresses the needs for conceptual and procedural bases for decision-making and specific alternatives within the student's anticipated area of professional practice. The School Leaders Licensure Assessment examination is required for licensure.

Fall Semester, Year One

EDN 566	The School as a Socio-Technical System	(3)
EDN 564	Policy Formulation as a Systemic Process	(3)
EDN 582	Interdisciplinary Humanities Seminar	(3)
EDN 513	Leadership for Learning	(3)

Spring Semester, Year One

EDN 568	Educational Program Design and Evaluation	(3)
EDN 523	Research in Education	(3)
EDN 512	Legal Structures in Education	(3)
EDN 580	Reflective Practicum	(2)

Fall Semester, Year Two

EDN 526	Essential Management Skills for School Leaders	(3)
EDN 570	Internship: Leadership Applications I	(6)
EDN 599	Thesis in Education	(3)
or		
EDN 5XX	Selected Graduate Course	(3)

Spring Semester, Year Two

EDN 571	Internship: Leadership Applications II	(6)
EDN 599	Thesis in Education	(3)
or		
EDN 5XX	Selected Graduate Course	(3)

Comprehensive Examination (for non-thesis students)
Oral Defense (for thesis students)

MASTER OF ARTS IN TEACHING

Admission Requirements

Applicants seeking admission to the M.A.T. program in secondary education are required to submit the following to the Graduate School:

1. An application for graduate admission
2. Official copies of all college work (undergraduate and graduate)
3. Official scores on the Miller Analogies Test or Graduate Record Exam
4. Three recommendations by individuals in relevant professional fields

A score of 40 on the Miller Analogies Test or equivalent score on the Graduate Record Exam is required. A grade average of "B" in the undergraduate major also is required. However, admissions decisions are based upon several factors and where other indicators of success warrant, individuals who fall below the established criteria in one of the areas may be considered for admission.

Degree Requirements

The program leading to the Master of Arts degree (M.A.T.) in secondary education provides professional training for a) "licensure-only" students who already have a degree and wish to gain teacher licensure and b) lateral-entry teachers. The 39-semester hours program is comprised of 21 semester hours in professional education competency areas and 18 hours in the academic specialization. The M.A.T in Secondary Education is offered in the following specialties: English, history, mathematics, and science.

Based upon the view of the teacher as a decision-maker, the program is comprised of a core of professional studies designed to enhance the instructional decision-making of secondary teachers and a specialization track designed to enhance knowledge of subject matter, structure of the disciplines, and appropriate modes of inquiry. The PRAXIS Examination, specialty area, is required for licensure.

I. Professional Core (9 Hours)

EDN 520	Instructional Development	(3)
EDN 523	Research in Education	(3)
EDN 528	Secondary School Organization	(3)

II. Pedagogical Expertise (21 Hours)

Select one of the following methods courses (3 semester hours):

LIC 503	Advanced Theory and Practice in Teaching Secondary English	(3)
LIC 504	Advanced Theory and Practice in Teaching Secondary Math	(3)
LIC 505	Advanced Theory and Practice in Teaching Secondary Social Studies	(3)
LIC 506	Advanced Theory and Practice in Teaching Secondary Science	(3)

Plus 18 hours in the Academic Specialization (see Section IV.)

III. Professional Development (9 Hours)

LIC 509	Internship in Secondary Schools	(6)
LIC 521	Seminar on Secondary Learners	(3)

IV. Academic Specialization

A. English (18 hours) — Courses must be approved by advisor.

Choose literature or critical literacy focus:

Literature Focus

ENG 501	Introduction to Research Methods in English	(3)
ENG 502	Introduction to Literary Theory	(3)
Two literature courses		(6)
Additional English courses		(6)

Critical Literacy Focus

ENG 552	Rhetorical and Culture	(3)
ENG 554	Theories and Practices of Critical Literacy	(3)
Additional English courses		(12)

B. History (18 hours)

HST 500	Historiography	(3)
Course in US history		(3)
Course in European history		(3)
Course in global history		(3)
Additional social studies courses		(6)

C. Mathematics (18 hours)

MAT 511-512	Real Analysis	(3-3)
MAT 541	Modern Algebra I	(3)
MAT 542	Modern Algebra II	(3)
Additional mathematics courses		(6)

D. Science (18 hours)

Selected science courses based upon background in order to provide breadth and depth (at least two in physical sciences and two in life sciences). (18)

GRADUATE PROGRAM IN EDUCATION
Course Descriptions

EDN 500. Human Development and Learning (3) Designed to provide foundations for decision–making in teaching and education, this course will focus on patterns of physical and social development and on types of learning. Activities will include analysis, discussion, and application.

EDN 501. Language Development (3) Focus on the development of language and its relation to cognitive processes in young children. Theories of language learning and growth are explored in terms of patterns of evidence and in terms of implications for decision–making affecting school children. Concepts associated with language structure, functions, and processes are developed. A variety of language and language–education topics are explored.

EDN 502. Schools and Society (3) Designed to develop competency in the analysis of social effects upon behavior within the school, this course will include an examination of role, value, power, and control systems within schools and how these systems relate to the changing functions of the family and work place. This information will be related to current issues in the educational system, such as compulsory attendance, level of control, and multiculturalism.

EDN 503. Development of Childhood Disabilities (3) Designed to provide an understanding of the intellectual, emotional, and physical development of children with disabilities. The interplay of

biological and environmental factors that produce deviations in development is examined. Organized around a developmental approach to the study of disabilities. Implications of developmental differences for the special educator will be stressed.

EDN 505. The Reading Process (3) Prerequisite: Consent of instructor. Explores alternative views and supporting evidence concerning the nature of the reading process and the acquisition of reading. Emphasizes the development of print knowledge, word recognition, comprehension, metacognition, fluency, and relationships between reading, writing and language. Implications for assessment and instruction are discussed.

EDN 506. Advanced Methods of Secondary Instruction (3) Examination of students' understanding as a primary outcome of teaching with development of the teacher as a researcher. Emphasis on reflective practice and application of theory in planning, curriculum development, instructional strategies, selection of appropriate instructional materials, and appropriate use of technology.

EDN 509. Education in a Multicultural Context (3) Examines the factors affecting the achievement of equal educational opportunities for all students, including those of race, ethnicity, class and gender. Emphasizes awareness and understanding of culturally diverse students, and develops skills to enhance their educational environments.

EDN 510. Organization and Control of American Education (3) Designed to include a study of the roles of agencies involved in the governance of education, sources of finance and supportive services. Activities will include lectures, simulated exercises and an opportunity to participate in field activities.

EDN 511. Organizational Behavior (3) Designed to develop competency in the analysis of behavior in educational organizations, this course will include an examination of organizational theory with particular attention to the utility of social–systems theory as a basis for effective educational leadership. A variety of activities including simulation and case studies will be used to demonstrate application in school settings.

EDN 512. Legal Structures in Education (3) Provides students with knowledge of legal structures in the field of education, as well as in-depth coverage of essential legal principles and cases in both North Carolina and at the federal level. Course content includes the constitutional foundations of legal principles, and the alignment of educational practice with legal principles. Activities will include lecture, discussion, research, and analysis of school practices and pertinent law.

EDN 513. Leadership for Learning (3) Designed to provide school leaders with the conceptual and analytic tools necessary to design and evaluate classroom instruction and school-wide instructional improvement efforts. Instructional units will examine principles of instructional design, assessment of teaching, and strategies of professional development. Activities will include lectures, seminar discussion and participation in case and field-based analysis.

EDN 520. Instructional Development (3) Designed to provide students with the knowledge and skill required for designing and evaluating instructional plans, units, and educational programs. This course will include concern for such topics as types of learning, learning hierarchies, task analysis, educational goal and objective formulation, assessing learner entry skills, and evaluation. The course will include a variety of activities with a strong emphasis on group problem solving and individual projects. Students will undertake projects relevant to their in–school experience.

EDN 521. Leadership in Educational Institutions (3) Designed to develop knowledge and skill in (a) the identification and analysis of decision situations, alternatives, procedures for choice and design, and analysis of educational information systems; (b) planning techniques (including Quality Organization, results-management, strategic planning, systematic network planning, and

objectives); and (c) principles of group process, motivation and interpersonal relations, the effects of leadership forms in mobilizing student, staff and community support for educational programs, and strategies for developing effective public relations programs. Activities will include lecture, discussion, case and situation analysis of school systems.

EDN 522. Educational Media (3) Designed to provide students with the theory and practical skills necessary for selecting, producing, and evaluating instructional materials. Students will learn to produce and use a variety of audio–visual materials including graphics, transparencies, slides, and video–tapes. Instruction in operating and troubleshooting equipment also will be treated. The primary goal of this course is to develop confidence and competency in the media area. This course will include lectures and a workshop format. During the course students will produce media materials for an instructional unit.

EDN 523. Research in Education (3) Designed to develop research competencies required for interpretation and critique of research reports and for design and conduct of research for educational decision–making. Contents will include measurement, problem identification and analysis, research design, selected statistical analysis procedures, data interpretation and reporting and research critique. Activities will include lecture, discussion, research critique, simulated and actual proposal development, simulated report development, and computer analysis of actual data.

EDN 525. Tests, Measures, and Measurement in Education (3) Prerequisite: EDN 301, EDN 520, or approval of instructor. Designed to develop a conceptual framework for obtaining and interpreting data about behavioral and psychological traits of persons that may be needed for a variety of purposes. Particular attention will be given to developing understanding of validity of measures for the intended purposes and for assessing the trait that is intended to be measured. Students will learn to make judgments of validity of testing systems and to develop valid tests and testing systems. Mathematical and statistical tools will be studied for analyzing items, tests, and scores and students will practice their use. Students will learn to use computers for test development, and test administration, and to analyze records of performance on tests.

EDN 526. Essential Management Skills for School Leaders (3) Corequisite: EDN 570. In association with the year-long internship and in the context of sociocultural foundations provided in the first year of the school administration program, provides basic knowledge in six human resources skill areas essential to effective leadership and management in schools: planning, resource management, personnel development and evaluation, leadership development, instructional improvement, and communications.

EDN 527. Research in Science Teaching and Learning (3) An introduction to the theoretical, methodological, and empirical foundations of research in science teaching and learning, emphasizing literacy in qualitative and quantitative investigation. Consideration is given to experimental, naturalistic, descriptive, interpretive, and case studies.

EDN 528. Secondary School Organization (3) Examination of the organizational structure of high schools with the primary focus on developing the knowledge and skills needed to be effective teacher leaders. Changes in curriculum and instruction, and the role of school leadership are discussed. Exemplary models of high school reform, as well as current issues at the secondary level, are examined.

EDN 530. Curriculum (3) Develops a conceptual framework for understanding curriculum in relation to other aspects of educational systems. Students learn to evaluate curricula in terms of structural elements, underlying value orientations, and assumptions about subject matter and about learning. Introduction to issues of curriculum change, implementation, evaluation, development, and design.

EDN 531. Study of Teaching in Early Childhood Education (3) Designed to improve teaching performance and to develop competencies in the critical analyses of teaching in the early grades, this course will include an in–depth study of teaching in the early grades by observation and participation using different interaction analysis formats for studying and analyzing teaching.

EDN 532. Comparative Studies in Early Childhood Education (3) Designed to provide information for comparing and contrasting preschools from an international perspective, this course will include an in–depth cross–cultural survey of early childhood education in selected countries. The history of philosophical thoughts, the political and socio–economic changes and research efforts from these selected countries of interest to American early childhood educators will be studied and discussed.

EDN 533. Early Childhood Education in Focus (3) Designed to develop the ability to look to current trends and issues in early childhood education. Objectively, this course will include critical analysis of present exemplary programs, practices, resources, and legislation related to early childhood education. The student will be involved in identifying unresolved issues in early childhood education and writing position papers about these issues.

EDN 534. Teaching Developmental Reading (3) Designed to develop understandings of an effective classroom reading program. Reviews practices, materials, and approaches for teaching basic reading skills through the analysis of research literature and critique of personal beliefs and practices.

EDN 535. Diagnosis and Teaching of Reading/Language Arts (3) Designed for the elementary, special education, and reading teachers, this course focuses on the comparison of alternative models for assisting individual learners with literacy/language learning. Students review current diagnostic tests, new diagnostic procedures, develop teaching strategies and apply those understandings to the tutoring of individual students. A diagnostic report is generated. Students are expected to articulate a position concerning the viability of models for diagnostic teaching in their school setting.

EDN 536. Teaching Reading in the Content Area (3) Designed for the middle grades teacher of mathematics, science, social studies, and English, this course will identify those skills of reading needed in all content areas as well as those specific to each content area. Emphasis will be placed on the study of strategies useful in teaching reading in the content area classroom. Besides the study of appropriate commercial materials, students will be required to develop their own materials useful for teaching reading in a particular content area.

EDN 537. Linguistics for Teachers (3) A study of current American English and of the principles of analysis of spoken and written language; emphasis on understanding that nature and structure of the language that students bring into the classroom. Includes exploration of language related educational issues such as bilingualism, dialects, and disorders.

EDN 538. The Teaching of Writing and Other Forms of Representation (3) Review of theories of composition, writing processes, and principles of grammar, rhetoric, and usage. Attention to methods of instruction and to the range, usefulness, and availability of materials including technology. Includes projects that require generating and evaluating samples from school-age writers in grades K-12.

EDN 539. Children's Literature (3) Designed to develop skills and understandings to improve teachers' competencies in formulating sound literature programs. Includes in–depth study of the functions of children's literature and criteria for evaluation of types of literature suitable for children at various developmental levels. Factors influencing change such as paperbacks, representation of minorities, sexism, and censorship will be discussed.

EDN 540. Adolescent Literature (3) A comprehensive study of literature appropriate for the middle grades, its value in the school curriculum and its importance in fulfilling intellectual, emotional, and cultural needs of young people. Evaluation and bibliography are emphasized; classroom techniques and the use of related materials are covered. Projects related to instructional preparation and student activities are required.

EDN 541. Role of Literature in Learning and the Curriculum (3) An exploration of the great wealth of trade books available for today's students from kindergarten through high school. Examines the importance of literature in learning and in life. Studies issues and trends such as cultural diversity, censorship, and response theories which will help guide students toward comprehensive, creative, and insightful utilization of literacy materials.

EDN 542. The Teaching of Mathematics (3) Focus on materials and methods for teaching mathematics in grades K-9, with emphases on the logical, psychological, and sociological foundations of mathematics education. A survey of curricula appropriate at the K-9 level. Library research in current topics related to the teaching of mathematics.

EDN 543. The Teaching of Social Studies (3) Special emphasis is given to the various techniques and methods to be used in the teaching of social studies. Teaching strategies including simulation, inquiry and value clarification will be explored through research, observation, demonstration and, when applicable, field trips. Each student will prepare a major unit of study which will require both individual and group participation.

EDN 544. The Teaching of Science (3) To assure that science is taught from a theoretical and conceptual base, content will include studying theories and concepts related to science taught at various grade levels. Activities will include development of successful methods of teaching through the use of individual and group projects. Opportunities will be provided to field test methods proposed. Materials needed for a successful science program and sources from which these materials may be secured will be discussed.

EDN 545. Black Literature and Resources for Teachers (3) A survey of black literature, including the examination of materials published for classroom use in the public schools and the authors who have made contributions to this field.

EDN 546 . Assessment in School Mathematics (3) A survey and application of contemporary methods of assessing school mathematics (K-8). Techniques of assessment and interpreting assessment results will be considered. A case study will be required.

EDN 547. Integrating Language Arts and Reading: Classroom Practice (3) Designed to develop student ability to conceptualize and implement a classroom communication arts program. Analyzes patterns of learning and practices in teaching language arts processes and skills. Examines strategies for fostering language arts growth through integrated language activities. Field activity required.

EDN 548. Inquiry — The Method of Science (3) The course assumes initial–level competency in the curriculum and methods of science. The course will focus on the conceptualization of and rationale for using the inquiry method of teaching science. Students will participate in activities taken from a variety of science curriculum programs for elementary through senior high school. The course also will provide students with an opportunity to acquire and practice the skills needed to utilize the inquiry method and to guide scientific investigations at K–12 levels. Methodology and types of activities appropriate to the student's level of teaching will be selected.

EDN 549. Middle School Education (3) Study of educational programs for upper elementary education (junior high, middle school, intermediate school). Review of learning, physical, and social

characteristics of "transescents" and historical and current approaches to their education. Comparison and contrast of curriculum, instruction, administrative and organizational features of exemplary and typical intermediate, middle and junior high schools.

EDN 550. Nature and Needs of Children With Exceptionalities (3) Designed to provide a comprehensive survey of the major categories of children with exceptionalities. Emphasis will be on characteristics, etiology, educational procedures, and psycho–social implications. Activities will include lecture, discussion, and practical applications of concepts and strategies. Designed for majors in general education programs.

EDN 551. Exploring Your Own Literacy and Literacy Education (3) Surveys the field of literacy to include a history of the field, significant scholars and their impact, and important issues and trends. Participants will discover their own literacy through writing and reading experiences of their choice. Program expectations will be introduced.

EDN 555. The Mildly Handicapped Adolescent (3) Designed to provide a basis for understanding the educational needs of mildly handicapped adolescents. The following topics will be covered during the course: the impact of handicapping conditions on the developmental tasks of adolescence; strategies for the remediation of deficits in basic skills; the interrelationship of vocational intervention; the current status of educational programs for the mildly handicapped.

EDN 556–557. Clinical Teaching in Reading Recovery (3–3) Prerequisite: Permission of the instructor. Develops skills in observing, recording, and analyzing children's reading and writing behaviors and in implementing effective methods for teaching literacy to young children at risk of reading failure. Generates understanding of theories of reading and writing processes and of reading acquisition from an emergent literacy perspective.

EDN 558. Foundations of Language and Literacy (3) Prerequisite: EDN 551 or permission of instructor. Corequisite: EDN 569. Explores the development of language and literacy in relation to cognitive development. Develops conceptualization of reading and writing as psycholinguistic and strategic processes. Explores implications of theories of language and literacy development for decision-making affecting teaching practices and school learning.

EDN 559. Adult Literacy (3) Examines the definition of illiteracy and the problem of adult literacy. Reviews approaches to dealing with the problem from philosophical, pedagogical, and sociological bases. Reviews the many movements to overcome the problem in the United States and abroad. Provides students with ideas, methods, and materials for teaching adults to read.

EDN 560. Personnel Administration (3) Prerequisites: EDN 502, 510, 511, 521, or approval of department. Designed to develop knowledge, skills, and abilities in specification and analysis of roles and role performance, and in selection, supervision, and utilization of personnel resources. The contents will include educational roles, criteria for role performance, personnel selection criteria and procedures, personnel policies and practices, and labor relations. Activities will include lecture, discussion, analysis and design of simulated and actual personnel procedures and a variety of simulated personnel related tasks.

EDN 561. Leadership Applications (3) Prerequisites: EDN 502, 510, 511, 521, or approval of department. Designed to develop skills and abilities in analysis, initiation, establishment, and maintenance of specific educational procedures. The contents will include specific procedures for scheduling, office management, pupil control, co–curricular program design and management, curricular program design and management, communications, information systems, and budgeting. Activities will include lecture, discussion, visitation, simulated and actual applications, and selected practicum experiences.

EDN 562. Introduction to Administrative Applications of Technology (2) Designed to provide an introduction to basic technologies associated with word processing, spreadsheets, data-base usage, network communications, and models for decision-making, problem-solving, and project planning. Students will develop basic competency in the operation of computer based applications of technology to address typical problems and needs facing school administrators.

EDN 563. Educational Environments (3) Designed to develop knowledge skills, and abilities in the analysis, design and change of physical and social environments in education with emphasis on providing a welcoming environment for all students. Activities will include lecture, discussion, library research, case studies, and a variety of group and individual projects.

EDN 564. Policy Formulation as a Systemic Process (3) Designed to develop student's ability to engage in effective school level policy formulation. Emphasizes analysis of institutional level explanations of school policy environments; national, state, and district influences on school level policy formulation; and the dynamic realities of strategic policy decision-making in a community of diverse and competing interests. Emphasis on the role of school leaders in formulating policy which supports stated goals, objectives school visions, and school roles. Study and analysis of the types and nature of policy and implementation decisions associated with policy issues in an actual school setting.

EDN 565. Applied Research Practicum in Secondary Schools (3) Prerequisite: EDN 523. Designed to develop curriculum, instructional, and research skills in the content areas, the course will address methods, applications, and research within specific content areas. Students will demonstrate planning and presentation skills in a supervised practicum and complete a research project and report.

EDN 566. The School as a Socio-Technical System (3) Examines theory and research characterizing the school as a socio-technical system, a complex of interdependent institutional, organizational, technological, human, and sociocultural forces which collectively act to produce behavior and outcome. Learners will utilize this systemic perspective to analyze human behavior in a school.

EDN 567. Learning-Centered Supervision (3) Develops an understanding of adult developmental theories and supervision models in relation to application for development of teachers at beginning of their careers. Topics include clinical supervision, research on novice teachers, conditions and strategies that support growth, and specific differentiated supervisory strategies. Students will develop materials and collect resources to support a model of curricular/instructional reform.

EDN 568. Educational Program Design and Evaluation (3) Intended to familiarize students with a variety of approaches for planning and conducting evaluation and to provide practical guidelines for general evaluation. Within this framework, more specific goals are to develop awareness of and sensitivity to critical concepts and issues in educational evaluation, to develop a clear perspective about the role of evaluation in education, and to develop ability to conduct useful, feasible, and technically sound evaluation studies.

EDN 569. Seminar in Language and Literacy Foundations (1) Corequisite: EDN 558. Designed to explore language at all educational levels, synthesize, and apply ideas to language and literacy development and diversity.

EDN 570-571. Internship: Leadership Applications I, II (6) (6) Designed to provide opportunities to experiment in "real world" settings with ideas presented in other courses throughout the leadership program. Observation and analysis of management practices and application experiences under guidance of professionals. Students will generate responses to real problems in each of the six skill areas addressed in EDN 526, Essential Management Skills for School Leaders.

EDN 572. Practicum in Reading (3) Prerequisite: EDN 588. Application of understandings of literacy processes and literacy acquisitions to the level of the classroom. Student designs and implements a classroom program based upon a defensible philosophical perspective.

EDN 573. The Disabled Reader (3) Prerequisites: EDN 588, 589. Designed to develop competence and performance in testing teaching, and designing reading/learning programs for the severely disabled reader. Appropriate referral services will be identified. Consultation skills will be developed. Supervised practicum required.

EDN 575–576. Seminar and Practicum in Early Literacy Intervention (3–3) Prerequisite: Permission of the instructor. Co–requisites: EDN 556-557. Explores theories of professional development, supervision, and systematic changes and issues affecting early literacy, program development, and teacher learning. Develops skills for implementing, evaluating, and improving literacy intervention programs, including Reading Recovery™, and skills in facilitating conceptual change and improving teaching performance. Seminar and practicum experiences extend over two semesters.

EDN 577. Practicum in Middle Grades Education (3) Prerequisite: Six hours of graduate study in the academic content. Designed to provide a supervised internship in a middle grades setting. Focus on integration of graduate level academic content in area of certification with instructional strategies. Should be taken concurrently with an appropriate methods course.

EDN 578. Practicum in Developmental Instructional Supervision (3) Prerequisite: EDN 567. Practicum experience designed to extend students' understanding and application of theory, concepts, and techniques of learning centered supervision. Students will be engaged in a variety of supervision activities while mentoring a colleague, beginning teacher, or student intern in an educational setting. Includes self-analysis of own supervisory practices and the development and implementation of a plan for professional development.

EDN 579. Instructional Leadership in Secondary Schools (3) Facilitates the development of instructional leadership skills and professional documentation of scholarly teaching by providing expectations and assignments promoting development of leadership skills and preparation and defense of professional documentation and portfolio products.

EDN 580. Reflective Practicum (2) Intended to develop norms of reflective practice, scholarly inquiry, cultural sensitivity, and collaboration through focused observation and analysis of school structure and practices. The analytical skills and tools will be drawn from, and will represent a synthesis of, theoretical and conceptual material developed in parallel courses. The practicum will foster students' quantitative and qualitative research skills.

EDN 582. Interdisciplinary Humanities Seminar (3) The course examines core educational themes (the nature of community; authority and leadership; self and society) as they are theorized and portrayed in the humanities. Emphasis is placed on school leaders as carriers of both technical and humanistic skills, and on schools as both technical and human systems.

EDN 584. Development of Language and Literacy (3) Prerequisites: EDN 558 and EDN 569 or permission of instructor. Corequisite: EDN 585. Course participants will identify literacy beliefs, learn related literacy practices and examine their use in classrooms, review curriculum, and develop a perspective on literacy learning. Students will be engaged in reading and writing workshop events and will be expected to design and implement an action research plan and develop items for the literacy portfolio.

EDN 585. Seminar in Development of Language and Literacy (1) Corequisite: EDN 584. Designed to support synthesis of theoretical knowledge of literacy education and provide opportunity to

design practical responses for classroom applications. Students will implement the action research plan as formulated in EDN 584, Development of Language and Literacy.

EDN 586. Program Practices and Procedures in Language and Literacy (3) Prerequisite: EDN 584 or permission of instructor. Corequisite EDN 587. Examines contrasting literacy beliefs and the accompanying literacy programs, practices, and procedures for the purpose of informing personal beliefs and practices. Students will analyze a classroom, school or school system change project.

EDN 587. Seminar in Programs, Practices and Procedures in Language and Literacy (1) Corequisite: EDN 586. Synthesis of theoretical and practical knowledge of literacy programs, practices and procedures in systems of change and school reform. Students will design and be involved in a classroom, school or school system change project and reflect on professional and personal learnings from that involvement.

EDN 588. Assessment in Language and Literacy (3) Prerequisite: EDN 586 or permission of instructor. Focuses on development of a conceptual framework for obtaining and interpreting data about students' language and literacy performance. Basic concepts of assessment and measurement and current practices will be covered.

EDN 589. Tutoring for Literacy Development (3) Prerequisite: EDN 588. Application of assessment theories and practices within a tutoring experience for a school-age learner. Students will assess and tutor in a supervised context and will generate a literacy portfolio.

EDN 590. Practicum in Elementary Education (3) Prerequisite: At least 18 hours of graduate coursework. Designed to provide a supervised internship in a school setting. Focus on execution and evaluation of a project involving application of theory and pedagogical principles and practices studied in the graduate program.

EDN 591. Independent Study (3) Prerequisites: 15 semester hours of graduate credit and permission of instructor. Intensive study of topic in the student's area of specialization.

EDN 593. Contemporary Perspectives in Education (1) Independent investigation of a contemporary controversial educational issue. Students will research a topic, take a professional stance, and defend their position in a formal presentation to faculty and students. Must be taken during the semester in which the comprehensive exam is scheduled.

EDN 594. Seminar in Education (1–4) Designed to assist the elementary reading or special education graduate student in identifying and synthesizing ideas within and across courses and formulating reasoned responses to contemporary educational questions.

EDN 595. Special Topics in Education (1-4) Seminars of varying duration and credit may be arranged for the study of special topics relevant to student needs not served by established graduate courses. Seminars of this nature may be offered only upon approval of the dean of the Graduate School. A maximum of six semester credit hours may be counted toward degree requirements.

EDN 598. Research Project (3) Prerequisite: EDN 527 or permission of instructor. Design, conduct, evaluate and report results of a research project selected by the student and approved by the advisor.

EDN 599. Thesis in Education (1-6) Prerequisites: EDN 523, at least 18 additional hours toward completion of the master's degree, and permission of instructor required. Intensive study of topic selected by student and approval by thesis committee. Includes definition of problem, review of

related literature, application of appropriate methodology, and interpretation of results and conclusions. Oral presentation and defense of thesis required.

M.S. in Instructional Technology Course Descriptions

MIT 500. Instructional Systems Design: Theory and Research (3) Designed to provide an analysis of theoretical foundations of instructional design and their application in design practice. The course will examine multidisciplinary and multicultural influences upon instructional theory and development. A broad range of current design research and theory, and future directions in design theory and practice will be explored.

MIT 501. Motivation in Instructional Design (3) Designed to provide a review and analysis of motivational theories in relation to instructional design strategies. The primary emphasis will be on the motivation to learn and techniques for stimulating and sustaining learner motivation.

MIT 502. The Systematic Approach to Performance Improvement (3) Provides an introduction to theories and techniques for solving training and nontraining problems in business, industry, and other performance-oriented organizations. Activities include needs assessment, analysis, solution selection, and job and task analysis.

MIT 510. Design and Development of Instructional Technology (3) Prerequisite: MIT 500 or approval of department. Emphasizes skills and understanding necessary to create effective, efficient, and appealing instruction in any content area and with any medium, including live instruction. Addresses both "process" and "product." Process is concerned with activities and media required to create and deliver the instruction. Product is concerned with what the instruction should accomplish. Students will engage in leading a team that designs, produces, implements and evaluates an instructional system developed for a field site. Team leaders will ensure the quality and integrity of the design and report.

MIT 511. Multimedia Design and Development (3) Focuses on systems, communication, aesthetic and learning theories applicable to designing instructional products. Provides an overview of multimedia strategies and tactics using multimedia and instructional communication. Students will demonstrate basic proficiencies across a wide spectrum of multimedia. Emphasis will be on visual, audio and typographic design as well as the appropriateness of these solutions for specific instructional goals. The use of advanced electronic technologies will also be emphasized.

MIT 512. Computer Applications in Education (3) Provides an introduction to the use of microcomputer applications as they apply in education settings. Activities includes hands-on experiences with computer-assisted instruction, computer-managed instruction, and administrative uses.

MIT 513. Computer-Based Instruction (3) Examines authoring systems to develop computer-based instruction. Students will develop skills in producing programs to meet instructional needs; in integrating the use of peripherals including scanners, video and audio digitizers, and videodisks into hypermedia applications. Four-to-six hour weekly lab participation will be required.

MIT 514. Distance Education (3) Prerequisites recommended: MIT 500 and MIT 510. Examines theories and models of distance education at home, work, and school. Activities include designing, developing, and evaluating instructor-led and learner-directed distance lessons for integrated electronic dissemination systems. Additional topics will include social, economic and organizational context of learning at a distance. Three-hour weekly lab participation will be required.

MIT 515. Web Teaching: Design and Development (3) Prerequisites: MIT 500 and MIT 511. Focus on principles of designing Internet-based (web-based) instruction. Students will use Internet tools and other instructional design principles to design and develop web-based instruction. Four-to-six hour weekly lab required.

MIT 516. Instructional Video Design and Production (3) Prerequisite: MIT 500 or permission of instructor. Designed to explore the process and techniques involved in professional video productions. Emphasizes fundamental theories and practice in camera and computer-based audio and video production, including recording, editing, and digitizing audio and video segments for education and training applications.

MIT 520. Managing Instructional Development (3) Examines principles of planning, scheduling, allocating resources, budgeting, proposal preparation, cost control and personnel management for instructional projects. Activities include negotiating an effective design project plan, how to implement that plan, and how to control and monitor project activities. Case studies will be used as a basis for exercises and discussions. Students will develop a plan that meets specific criteria.

MIT 521. Diffusion and Implementation of Educational Innovations (3) Designed to extend students' understanding of theories and research in the diffusion of innovations. Activities include investigation of the literature and research in diffusion of innovations and examination of theoretical and research findings to the diffusion of technological innovations.

MIT 522. Organization & Management of Instructional Technology Programs (3) Prerequisite: MIT 510 or instructor's permission. Examination of the planning and management of successful training, professional development, and technological projects in public or private schools. Topical areas include planning and developing technology projects, evaluating and analyzing school or district capacity and readiness for a new technology project, organizing and managing human resources and support systems, scheduling, budgeting, team structures, defining project requirements, and quality assurance. Analytical tools will be utilized to enhance project planning, scheduling, monitoring, and control, including software designed to support project managers.

MIT 530. Evaluation and Change in Instructional Development (3) Designed to provide an introduction to evaluation techniques associated with educational evaluation media and materials, courses, curricula, students or other elements in educational programs. Various units of the course will focus upon particular evaluation techniques.

MIT 531. Assessment of Learning Outcomes (3) Examines the nature and purpose of measurement and assessment of learning outcomes. Particular attention is paid to the concepts of reliability, validity, norms, interpretation of scores, response sets, fairness in testing and performance assessment, and norm-referenced vs. criterion-referenced tests. A variety of instruments that are used to measure or assess human attributes and behaviors will be studied.

MIT 540-541. Colloquium I & II (1) (1) Examines issues, theory, research, and practice shaping the field of Instructional Technology. A particular topic will be emphasized each time the course is offered. Students will engage in reviewing issues, identifying trends, debating theory application, and developing researchable questions.

MIT 542. Internship (1) Designed to provide opportunities to experiment in "real world" settings with knowledge and skills learned throughout the program. Internship sites may include on or off-campus, public or private organizations. Interns will apply knowledge and skills of the range of technology mediated instructional planning, design and delivery.

MIT 595. Special Topics in Instructional Technology (1-4) Seminars of varying duration and credit may be arranged for the study of special topics relevant to student needs not served by estab-

lished graduate courses. Seminars of this nature may be offered only upon approval of the dean of the Graduate School. A maximum of six semester credit hours may be counted toward degree requirements.

MIT 598. Portfolio (3) Prerequisite: Completion of a minimum of 18 hours toward completion of the master's degree and permission of the instructor. Portfolio will present evidence of student's successful completion of one or more extensive instructional development projects that singularly or together demonstrate the spectrum of instructional systems design processes.

MIT 599. Thesis (3) Prerequisite: Completion of a minimum of 18 hours toward completion of the master's degree and permission of the instructor. Intensive study of a topic selected by the student and approval by the thesis committee required. Includes definition of problem, review of related literature, application of appropriate methodology, and interpretation of results and conclusions. Oral presentation and defense required.

M.Ed. in Special Education
Course Descriptions

SED 502. Foundations of Special Education (1) Designed to explore the field of education for diverse learners at all educational levels. Emphasis will be on historical and current approaches to the education of exceptional children. Students will examine competencies needed by teachers of exceptional children. Selection of final product to demonstrate program competencies required.

SED 551. Advanced Pedagogy in Special Education (3) Drawing on current research on learning and instruction, this course examines in detail the design, implementation, and evaluation of Direct Instruction for teaching reading, mathematics, writing, and science. Students will become fluent with concepts and instructional techniques.

SED 553. Behavior Management Within Programs for Mildly Handicapped Students (3) Designed to develop knowledge and skills necessary for planning and implementing various classroom management strategies. Focus on observation and measurement of behaviors, design of classroom management strategies, and utilization of strategies in the special education and regular classroom environment.

SED 555. Mild Disabilities in Adolescence (3) Designed to provide a basis for understanding the educational needs of adolescents with mild disabilities. The following topics will be covered during the course: the impact of disabilities on the developmental tasks of adolescence; strategies for the remediation of deficits in basic skills; the interrelationship of vocational intervention; the current status of education programs for adolescents with mild disabilities.

SED 556. Collaboration and Teaming Strategies for Special Educators (3) Designed to develop the collaboration and teaming skills of special educators as they work in roles ranging from providing direct services to students to serving as co-teachers in inclusive classrooms. Emphasis on communication strategies, conflict resolution, generation of alternative solutions and service delivery models, and teaming skills.

SED 557. Technology Applications in Special Education (3) Designed to provide teachers of children with disabilities the skills to integrate technology, including assistive devices, into classroom instruction. The technology examined will focus on devices used to increase, maintain, or improve functional capabilities of children with disabilities.

SED 558. Issues and Trends in Special Education (2) Designed to focus on emerging directions related to the education of students with exceptionalities. Relevant instruction, assessment, service delivery, technology, management, legal, psychological, medical, and social issues will be examined as well as implications for schools.

SED 559. Practicum in Special Education (3) Designed to provide a supervised practicum in public programs for BEH, MR, and LD students. Provides experiences in diagnosing individual needs, developing education programs, instructing students with mild disabilities, designing and implementing classroom management techniques and consulting with teachers, administrators, parents, and other professionals.

SED 598. Portfolio Development in Special Education (3) Portfolio will present evidence of successful mastery of competencies in special education and synthesis of relevant research.

M.A.T. in Secondary Education
Course Descriptions

LIC 503. Advanced Theory and Practice in Teaching Secondary English (3) Focus on the connections between theory and practice in teaching English with emphasis on the role of inquiry in informing instruction. Opportunities to design and implement lessons in English using a variety of instructional strategies that meet curriculum objectives, as well as address the needs of diverse learners. Reflection and self analysis are emphasized throughout the course.

LIC 504. Advanced Theory and Practice in Teaching Secondary Mathematics (3) Focus on the connections between theory and practice in teaching mathematics with emphasis on the role of inquiry in informing instruction. Opportunities to design and implement lessons in mathematics using a variety of instructional strategies that meet curriculum objectives, as well as address the needs of diverse learners. Reflection and self analysis are emphasized throughout the course.

LIC 505. Advanced Theory and Practice in Teaching Secondary Social Studies (3) Focus on the connections between theory and practice in teaching social studies with emphasis on the role of inquiry in informing instruction. Opportunities to design and implement lessons in social studies using a variety of instructional strategies that meet curriculum objectives, as well as address the needs of diverse learners. Reflection and self analysis are emphasized throughout the course.

LIC 506. Advanced Theory and Practice in Teaching Secondary Science (3) Focus on the connections between theory and practice in teaching science with emphasis on the role of inquiry in informing instruction. Opportunities to design and implement lessons in science using a variety of instructional strategies that meet curriculum objectives, as well as address the needs of diverse learners. Reflection and self analysis are emphasized throughout the course.

LIC 509. Internship in Secondary Schools (6) Corequisite: LIC 521. Full-time practicum experience within the area of specialization. Students will engage in a variety of supervised instructional activities, assuming an increasing amount of responsibility for all phases of classroom instruction.

LIC 521. Seminar on Secondary Learners (3) This course will focus on strategies for teaching students with special needs and the knowledge and skills needed for effective classroom management. Students will study alternative methods for dealing with pupil differences that have an impact on academic and social behaviors. Characteristics of students with academic, intellectual, social-emotional, physical, cultural and language differences will be examined.

THE SCHOOL OF NURSING

MASTER OF SCIENCE IN NURSING

In July 1998, the University of North Carolina's Board of Governors approved the Master of Science in Nursing (MSN) program at UNCW School of Nursing – the school's first graduate program in nursing. Recruitment of students will continue to be from, and address health needs in, a nine county area of the southeastern region of coastal North Carolina – an area the federal government has designated as having a shortage of health care providers. Approved by the North Carolina Board of Nursing, the 47 credit hour MSN program prepares students for the American Nurses Association's Family Nurse Practitioner Certification Examination, and to apply for licensure as a family nurse practitioner.

The purpose of the UNCW master's program in nursing is to prepare an advanced practice generalist who possesses knowledge, skills, and attitudes to provide community focused primary care for culturally diverse families in rural or medically underserved areas. The graduate of the UNCW School of Nursing master's program in nursing is able to:

1) deliver family-centered advanced practice nursing services, based upon a conceptual framework, in underserved rural or urban settings.
2) assume a leadership role in providing and coordinating healthcare through multidisciplinary collaborative relationships.
3) interact with individuals, families, and communities to promote health.
4) provide anticipatory guidance, health promotion/disease prevention, and health counseling to facilitate maximum health status.
5) influence present and emerging roles of advanced nursing practice to meet the health needs of persons in changing social and health systems.
6) base advanced nursing practice on synthesis of knowledge from social, behavioral, and natural sciences in addition to nursing theory and research.
7) demonstrate commitment and accountability to health consumers and to professional standards.
8) assume responsibility for continued personal and professional development.

Admissions requirements

Applicants seeking admission to the graduate program in nursing are required to submit the following to the Graduate School:

1. An application for graduate admission
2. Official transcripts of all college work (undergraduate and graduate)
3. Official scores on the Graduate Record Examination general test
4. Three recommendations by individuals who can comment on the applicant's potential for successfully completing the master's program. (One each from a former nurse faculty member and a current or former employer, preferred.)

In addition, the following required items should be submitted directly to the School of Nursing:

1. Survey form
2. A current, unrestricted Registered Nurse License in North Carolina
3. Two years clinical practice as a registered nurse with a baccalaureate degree in nursing preferred
4. Current resume or curriculum vitae

Other application requirements:

1. A comprehensive invited interview with the faculty of the UNCW School of Nursing may be requested for applicants.
2. Additional items as needed

Students desiring admission into the graduate program in nursing must meet the following requirements: (a) hold a baccalaureate degree in nursing from a nationally accredited nursing program at a college or university in the United States or its equivalent in a foreign institution based on a four-year program; (b) have a strong overall academic record with a "B" average or better in basic courses prerequisite to graduate study in nursing; and (c) present satisfactory combined scores on the verbal and quantitative sections of the Graduate Record Examination general test. (Test scores more than five years old at the time of application will not be considered.) In addition, students who are taking, or have taken, graduate work elsewhere must be in good standing at that institution to be eligible to take graduate work at UNCW.

Students entering the graduate program must have completed successfully the following undergraduate courses: health and physical assessment (completed within the past two years), community health, and nursing research. Applicants must have proximate access to a computer capable of supporting electronic mail, a web browser, and a word processing program. In addition, applicants must demonstrate ability to use these computer applications.

Applications which are postmarked no later than March 1 will receive first consideration for the following fall semester admission. Applications postmarked after March 1 will be reviewed on a space-available basis. Admission decisions are based on several factors, including a strong overall undergraduate academic record and satisfactory scores on the Graduate Record Examination; however, other indicators of success may be considered for admission.

Degree Requirements

1. A total of forty-seven (47) semester hours credit in graduate nursing courses. Forty-four of those credits are in required nursing courses. The required three credit hours in an elective may be a graduate nursing course or graduate course offered by other departments and approved by the student's graduate committee. No minor is required.
2. All courses required in the program are open only to graduate students.
3. Master of Science in Nursing students must complete all clinical courses with a grade of "B" or higher and maintain an overall "B" (3.0) average in the Family Nurse Practitioner program. A student ineligible to continue because of poor grades or incongruent core performance standards, based upon special circumstances, may petition the Graduate School for reinstatement. A petition for reinstatement must be accompanied by statements of endorsement or non-endorsement from the coordinator of the master's program and the dean of the School of Nursing. A student so reinstated will be dismissed if, again, an overall "B" average is not maintained, or if a grade below a "B" is earned in a clinical course.
4. A total of six semester hours of transfer credit will be accepted. Transferable courses include: nursing theory, nursing research, advanced pathophysiology, and advanced pharmacotherapeutics.
5. A minimum of 41 semester hours of graduate study must be completed in residence.
6. The program has no language requirement; however, one graduate language course, Spanish for Health Care Professionals, may be available as an elective.
7. A research activity consisting of a Nursing Research course (3 credits), and either a thesis (3 credits) or a master's project (3 credits), is required. The master's project emphasizes methods of implementing research findings to solve identified clinical problems or using research methods to evaluate advanced nursing practice. A scholarly presentation is required to disseminate findings from the research activity.
8. The oral Comprehensive Examination will be the thesis defense or the research project defense.
9. Each student must complete an approved course of study within five years of the date of the first registration for graduate study to be eligible for graduation.

Requirements for the Master of Science in Nursing

Core courses: Required of all students seeking a Master of Science in Nursing

I. Core Courses

NSG 500	Research for Advanced Practice Nursing	(3)
NSG 502	Theoretical Foundations of Nursing	(3)
NSG 503	Families in Rural and Urban Communities	(3)
NSG 504	Health Policy	(3)
NSG 505	Informatics	(1)
NSG 597	Master's Project	(3)
or		
NSG 599	Thesis	(3)

II. Clinical Core

NSG 512	Advanced Pharmacotherapeutics	(3)
NSG 514	Pathophysiology for Advanced Practice Nurses	(3)
NSG 510	Advanced Health Assessment and Diagnostic Reasoning	(3)
NSGL 510	Advanced Health Assessment and Diagnostic Reasoning Laboratory	(1)

III. Functional Area

NSG 515	Advanced Practice Roles and Issues	(2)
NSG 520	Advanced Primary Care of Families: Children	(3)
NSGL 520	Clinical Practicum I: Advanced Primary Care of Families: Children	(1)
NSG 521	Advanced Primary Care of Families: Young Adults	(3)
NSGL 521	Clinical Practicum II: Advanced Primary Care of Families: Young Adults	(1)
NSG 522	Advanced Primary Care of Families: Mid-Life and Aging	(3)
NSGL 522	Clinical Practicum III: Advanced Primary Care of Families: Mid-Life and Aging	(1)
NSGL 594	Advanced Clinical Practicum	(4)

IV. Elective(s)

One three hour elective is required. May be selected from the following:

NSG 580	Transcultural Health Care	(3)
NSG 581	Spanish for Health Professionals	(3)
NSG 583	Migrant and Farm Worker Health	(3)

Part-time Program

Students may enroll in the program part-time. The program may be completed in five years. Each student will work with his/her advisor in designing his/her part-time program of study. A copy of the suggested program of part-time study can be obtained from the School of Nursing, Student Services Office.

RN to MSN option

The UNCW School of Nursing RN to MSN option is an alternative pathway for admission to the Master's Degree Program. The RN to MSN option enables qualified registered nurse (RN) students to bypass the baccalaureate degree in nursing and pursue the Master of Science in Nursing (MSN). The family nurse practitioner (FNP) track is currently available. The RN to MSN option reduces the time ordinarily required to progress from RN to BS; then, from BS to MSN from approximately four years of full-time study to approximately three years of full-time study.

The Registrar's Office maintains dual enrollment (both RN to BS and RN to MSN) to allow the student to continue the RN-BS option, if he/she is unable to complete the MSN. Students in the first year of the RN to MSN option are not admitted to the UNCW School of Nursing, but take nursing courses by permission of the dean of the School of Nursing. Students must complete the undergraduate and graduate nursing courses required in the first year of the RN to MSN option in one academic year. Enrollment in the RN to MSN option does not guarantee admission to the graduate nursing program.

Admissions requirements to the RN to MSN option

Applicants seeking admission to the RN to MSN option in nursing must meet the following requirements:

1. An associate degree in nursing or a diploma in nursing
2. A current, unrestricted RN license in North Carolina or one of the Nurse Licensure Compact States
3. One year of professional experience as an RN; prefer 2 year
4. Complete the 53 credits in non-nursing undergraduate courses designated for the RN to MSN option with a 3.0 or better grade point average (on a 4 point scale) BEFORE application to the RN to MSN option
5. Must be admitted to UNCW as a degree-seeking undergraduate student
6. Must be admitted to the UNCW Graduate School as a non-degree seeking student
7. Submit to the School of Nursing Student Services Office official transcripts (or copies of transcripts) of all college work (undergraduate and graduate)
8. Three recommendations by individuals who can comment on the applicant's potential for successfully completing the master's program. (One each from a former nurse faculty member and a current or former employer, preferred.)
9. Current Resume or Curriculum Vitae

Applicants must have basic computer skills (at a minimum, ability to use electronic mail, a web browser, and a word processor - Microsoft Word preferred) since required undergraduate nursing courses are online.

The School of Nursing accepts applications for the RN to MSN option for **fall semester,** only. The deadline for application to the RN to MSN option for fall semester is April 30.

Admissions requirements to the Graduate School (degree-seeking) and the School of Nursing Graduate Program

Students enrolled in the RN to MSN option must complete application to the UNCW Graduate School and the UNCW School of Nursing MSN Program in degree-seeking status during the spring semester of the first year of the RN to MSN option. Applicants are required to submit the following to the Graduate School:

1. An application for graduate admission
2. Official transcripts of all college work (undergraduate and graduate)
3. Official scores on the Graduate Record Examination general test (Test scores more than five years old at the time of application will not be considered)

In addition, the following required items should be submitted directly to the School of Nursing:

1. Survey form
2. A current, unrestricted Registered Nurse License in North Carolina or a Nurse Licensure Compact State
3. Two years clinical practice as a registered nurse with a baccalaureate degree in nursing preferred
4. Current resume or curriculum vitae

Additional Information:

Applications postmarked no later than March 1 will receive first consideration for the following fall semester Graduate School admission. Applications postmarked after March 1 will be reviewed on a space-available basis. Admission decisions are based on several factors, including a strong overall undergraduate academic record, grade point average of at least 3.0 on undergraduate and graduate nursing courses in the first year of the RN to MSN option, and satisfactory scores on the Graduate Record Examination. Other indicators of success may be considered for admission.

Degree Requirements

1. The RN to MSN option requires:
   a. Fifty-three designated semester hour credits in undergraduate non-nursing courses
   b. Fifteen designated semester hour credits in undergraduate nursing courses
   c. Forty-four semester hour credits in graduate nursing courses and three semester hour credits in a required elective (47 graduate credits)
2. A total of forty-seven (47) semester hours credit in graduate nursing courses. Forty-four of those credits are in required nursing courses. The required three credit hours in an elective may be a graduate nursing course or graduate course offered by other departments and approved by the student's graduate committee. No minor is required.
3. All courses required in the program are open only to graduate students.
4. Master of Science in Nursing students must complete all clinical courses with a grade of "B" or higher and maintain an overall "B" (3.0) average in the Family Nurse Practitioner program. A student ineligible to continue because of poor grades or incongruent core performance standards, based upon special circumstances, may petition the Graduate School for reinstatement. A petition for reinstatement must be accompanied by statements of endorsement or non-endorsement from the coordinator of the master's program and the dean of the School of Nursing. A student so reinstated will be dismissed if, again, an overall "B" average is not maintained, or if a grade below a "B" is earned in a clinical course.
5. A total of six semester hours of transfer credit will be accepted. Transferable courses include: nursing theory, nursing research, advanced pathophysiology, and advanced pharmacotherapeutics.
6. A minimum of 41 semester hours of graduate study must be completed in residence.
7. The program has no language requirement; however, one language course, Spanish for Health Care Professionals, may be available as an elective.
8. A research activity consisting of a Nursing Research course (3 credits), and either a thesis (3 credits) or a master's project (3 credits), is required. The master's project emphasizes methods of implementing research findings to solve identified clinical problems or using research methods to evaluate advanced nursing practice. A scholarly presentation is required to disseminate findings from the research activity.
9. The oral Comprehensive Examination will be the thesis defense or the research project defense.
10. Each student must complete an approved course of study within five years of the date of the first registration for graduate study to be eligible for graduation.

Requirements for the RN to MSN option:

Non-Nursing Undergraduate Courses:

ENG 101
ENG 201
One course from each of three of these Basic Studies Categories:
- History
- Foreign Language
- Literature
- Philosophy and Religion
- Fine Arts

CHM 101
CHM 215 or BIO 110
BIO 240
BIO 241
BIO 246
PSY 105
PSY 223
SOC 105
SOC 345 or PSY 366
Statistics
Elective
Undergraduate non-nursing courses may be completed at UNCW or transferred from another school.

Nursing Undergraduate Courses

NSG 216	Contemporary Issues in Nursing Practice	(3)
NSG/NSGL 250	Health Assessment	(3)
NSGL 389	Family Nursing Practicum	(2)
NSG 410	Theoretical Foundations for the Professional Nurse III: Community Health Nursing	(3)
NSG 415	Research in Nursing	(2)
NSG 490	Capstone Clinical Experience	(2)

Undergraduate nursing courses must be completed at UNCW during the first year of the RN to MSN option.

Full-time Enrollment Plan for RN to MSN Option

First Year					
Fall Semester			**Spring Semester**		
NSG 216	**Contemporary Issues in Nursing Practice**	**(3)**	**NSG/NSGL 250**	**Health Assessment**	**(3)**
			NSG 410	**Community Health**	**(3)**
NSGL 389	**Family Nursing Practicum**	**(2)**	**NSG 490**	**Capstone Clinical Experience**	**(2)**
NSG 415	**Research in Nursing**	**(2)**	**NSG 512**	**Advanced Pharmacotherapeutics**	**(3)**
NSG 503	**Families in Rural and Urban Counties**	**(3)**			
10 credits			**11 credits**		

Second Year								
Summer			Fall Semester			Spring Semester		
NSG 500	Research for Advanced Practice Nursing	(3)	NSG 502	Theoretical Foundations of Nursing	(3)	NSG/ NSGL 520	Advanced Primary Care of Families: Children	(4)
			NSG/ NSGL 510	Advanced Health Assessment and Diagnostic Reasoning	(4)	NSG/ NSGL 521	Advanced Primary Care of Families: Young Adults	(4)
			NSG 514	Pathophysiology for Advanced Practice Nurses	(3)			
3 credits			10 credits			8 credits		

Third Year					
Fall Semester			Spring Semester		
NSG 522/ NSGL 522	Advanced Primary Care of Families: Mid-Life and Aging	(3) (1)	NSG 594	Advanced Clinical Practicum	(4)
NSG 504	Health Policy	(3)	NSG 515	Advanced Practice	(2)
NSG 505	Informatics	(1)	NSG 597	Master's Project	(1)
NSG 597	Master's Project	(2)		Elective	(3)
10 credits			10 credits		

The complete list of nursing graduate courses required in the MSN/FNP Program is on page 174.

Part-time Program

Students must complete the undergraduate and graduate nursing courses required in the first year of the RN to MSN option in one academic year. Students may enroll in the second and third years of the RN to MSN option (graduate nursing courses) part-time. The program may be completed in five years. Each student will work with his/her advisor in designing his/her part-time program of study. A copy of the suggested program of part-time study can be obtained from the School of Nursing, Student Services Office.

GRADUATE PROGRAM IN NURSING
Course Descriptions

NSG 500. Research for Advanced Practice Nursing (3) Prerequisite: A basic statistics and undergraduate research course. Advanced principle and methods of research and evaluation of research designs. Emphasizes use of abstract and critical thinking in the application of research for advanced nursing practice.

NSG 502. Theoretical Foundations of Nursing (3) A theoretical foundation for implementing advanced nursing practice with individuals, families, and communities. Critical analysis and evaluation of selected models and theories generate conceptual models to guide advanced practice and research.

NSG 503. Families in Rural and Urban Communities (3) Exploration and comparison of theories and concepts related to families, emphasizing diverse, underserved, rural and urban families. Field experience will be provided in a variety of settings for assessing family health across the life span.

NSG 504. Health Policy (3) A debate-seminar course focusing on social, psychological, cultural, economic, political, legal, and ethical environments which shape health care delivery systems. Advanced nursing practice in primary care is studied relative to interprofessional relationships and leadership in health policy, health care reform, successful models of health delivery, poverty research, and interdisciplinary health management.

NSG 505. Informatics (1) Examines clinical information systems and applies informatics concepts for investigative inquiry.

NSG 510. Advanced Health Assessment and Diagnostic Reasoning (3) Corequisite: NSGL 510. This course focuses on assessment of health status of individuals and families throughout the lifespan. It emphasizes diagnostic reasoning as the decision making process which differentiates normal from abnormal health states. The course also addresses cultural and developmental variations.

NSGL 510. Advanced Health Assessment and Diagnostic Reasoning Laboratory (1) Corequisite: NSG 510. Focused clinical application of skills from NSG 510. The course emphasizes practice for diagnostic reasoning and addresses cultural and developmental variations. Minimum of four laboratory hours per week.

NSG 512. Advanced Pharmacotherapeutics (3) Emphasizes pharmacotherapeutic management or health maintenance of clients with common acute or chronic health problems who live in underserved rural or urban locales. Includes knowledge and tools needed by advanced practice nurses to prescribe medications and monitor effectiveness of those medications prescribed.

NSG 514. Pathophysiology for Advanced Practice Nurses (3) An advanced course in the pathophysiology of human conditions. Emphasis is on selected diseases and conditions of various body systems and the adaptation of those systems to disease across the life span.

NSG 515. Advanced Practice Roles and Issues (2) Prerequisites: NSG 500, 502, 503, 504, 505, 510, NSGL 510, 512, 514, 520, NSGL 520, 521, NSGL 521, 522, NSGL 522. A seminar focused on issues encountered in an advanced practice role. Includes advanced practice historical perspective, professional role dynamics and development, and practice management.

NSG 520. Advanced Primary Care of Families: Children (3) Prerequisites: NSG 500, 503, 510, NSGL 510. Corequisites or prerequisites: NSG 502, 512, 514, NSGL 520. A theoretical and patient management course focused on well, acute, chronic, and emergent pediatric care provided by the advanced primary care nurse practitioner for underserved children and their families in rural or urban settings. Specific areas of content will be health promotion, health maintenance, self care skills, disease prevention, and injury protection. Family systems, community, and culture will be the contexts for the levels of service.

NSGL 520. Clinical Practicum I: Advanced Primary Care of Families: Children (1) Corequisites: NSG 520. Focused, intensive clinical practice experiences for family nurse practitioner students. Students gain increasing skill in providing primary health care to underserved children, aged from newborn to 18 years old, and their families in rural or urban settings. Students practice with increasing independence under the supervision of on-site clinical preceptors for a minimum of 120 clinical hours per semester.

NSG 521. Advanced Primary Care of Families: Young Adults (3) Prerequisites: NSG 500, 502, 503, 510, NSGL 510; Corequisite or Prerequisite: NSG 512, 514; Corequisite: NSGL 521. A theoretical and patient management course focused on acute, chronic and emergent care of young men and women across the life span, provided by the family nurse practitioner in rural or urban settings. Specific areas of content will be health promotion, health maintenance, self care skills, vul-

nerability, disease prevention and injury protection. Family systems, community and culture will be the contexts for the levels of service.

NSGL 521. Clinical Practicum II: Advanced Primary Care of Families: Young Adults (1) Corequisite: NSG 521. Focused, intensive clinical practice experiences for family nurse practitioner students. Students gain increasing skill in providing primary health care to underserved young adults and their families in rural and urban settings. Students practice with increasing independence under the supervision of on-site clinical preceptors for a minimum of 120 clinical hours per semester.

NSG 522. Advanced Primary Care of Families: Mid-Life and Aging (3) Prerequisites: NSG 500, 502, 503, 510, NSGL 510; Corequisite or prerequisite: NSG 505, 512, 514; Corequisite: NSGL 522. A theoretical and patient management course focused on acute, chronic and emergent care of underserved mid-life and aging adults and their families provided by the family nurse practitioner in rural or urban settings. Specific areas of content will be health promotion, health maintenance, self care skills, disease prevention, and injury protection. Family systems, community, and culture will be the contexts for the levels of service.

NSGL 522. Clinical Practicum III: Advanced Primary Care of Families: Mid-Life and Aging (1) Corequisite: NSG 522. Focused, intensive clinical practice experiences for family nurse practitioner students. Students gain increasing skill in providing primary health care to underserved mid-life and aging adults and their families in rural and urban settings. Students practice with increasing independence under the supervision of on-site clinical preceptors for a minimum of 120 clinical hours per semester.

NSG 580. Transcultural Health Care (3) Prerequisite: Permission of the instructor. Explores values and belief systems influencing health behaviors of culturally diverse groups from rural and urban settings. Emphasizes social, political and economic forces that influence access to and use of health care resources. Identifies a conceptual basis for assessment, planning, implementation and evaluation of health care for culturally diverse clients. Fosters cultural sensitivity to lifestyles, values, and concepts concerning health and health care.

NSG 581. Spanish for Health Professionals (3) Prerequisite: Permission of the instructor. Emphasizes achieving active command of language spoken in the Hispanic world related to health care. Includes practical communication, current vocabulary and colloquial expressions. Extensive use of audio aids.

NSG 583. Migrant and Farm Worker Health (3) Prerequisite: Permission of the instructor. An examination of health problems prevalent across the life span among Hispanic migrant workers and their families. Focus on cultural values and belief systems that influence health behaviors. Analysis of social, economic, legal and political forces that influence access to and use of health care services. Attention to cultural sensitivity requisite for effective intercultural communication between health care workers and Hispanic migrant workers and their families.

NSG 591. Directed Individual Study (1-3)

NSG 592. Special Topics (1-3)

NSGL 594. Advanced Clinical Practicum (4) Prerequisites: NSG 510; NSGL 510, 512, 514, 520 NSGL 520, 521, NSGL 521, 522; NSGL 522. Corequisite or prerequisite: NSG 515. A synthesis practicum experience to promote the development of independent assessment, diagnosis, and management by the family nurse practitioner with guidance of a preceptor for a minimum of 240 clinical hours per semester.

NSG 597. Master's Project (1-3) Prerequisites: NSG 500, 502, 504, 505. A research activity alternative to the thesis. The project emphasizes methods of implementing research findings to solve identified clinical problems or of using research methods to evaluate advanced nursing practice. A scholarly presentation is required to summarize the project.

NSG 599. Thesis (1-3) Prerequisites: NSG 500, 502, 504, 505. Intensive research study of a topic selected by student and approved by a thesis committee. A scholarly oral presentation and defense of thesis is required.

SPECIAL ACADEMIC PROGRAMS

INTERNATIONAL PROGRAMS

The Office of International Programs was established at the University of North Carolina at Wilmington to represent its commitment to international education. International education has been identified as a priority by the Office of the President of the University of North Carolina. The office has responsibility for coordinating study abroad programs, faculty and student exchange programs, and other international activities at the university. Its goal is to expand and strengthen international ties among individuals, offices, and programs on campus and to encourage the exchange and flow of ideas and information so crucial for the development of global knowledge and awareness. Further information can be obtained by contacting the assistant provost for International Programs in the University Union.

NATIONAL STUDENT EXCHANGE (NSE)

National Student Exchange (NSE) is a domestic student exchange program that offers UNCW students the opportunity to attend one of approximately 177 member institutions across the United States and its territories. With member institutions offering tuition reciprocity, and students continuing their eligibility for financial aid at UNCW, NSE represents one of the most cost-effective ways to travel and experience life in a new environment. Since NSE's founding in 1967-68, more than 70,000 students have been placed in life-challenging and life-changing experiences. For participating students, the semester or year on exchange is usually the most profitable and enjoyable time of their college career. Students experience a diversity of educational settings, course offerings, and philosophies. In addition, there is an increased awareness of the cultural and geographical differences within the U.S. The NSE application deadline is February 1 for placements in the following academic year. For more information, contact the Office of Housing and Residence Life or visit UNCW's NSE website at http://www.uncw.edu/stuaff/housing and click on the National Student Exchange link.

COOPERATIVE PH.D. IN MARINE SCIENCE

The Graduate School at UNCW cooperates with North Carolina State University in a joint program leading to a Ph.D. in marine science. The degree is awarded by the Department of Marine, Earth and Atmospheric Sciences at North Carolina State University and features opportunities for completing some course work and the dissertation research at UNCW. At UNCW, faculty in chemistry, geology, physics, mathematics and the biological sciences participate in the program. Marine science students complete a major field of study and are expected to be familiar with areas of marine science other than their own. Students applying for the program must have either previously earned a master's degree in an appropriate natural science at UNCW or other accredited institution or if holding only a bachelor's degree, must demonstrate clear evidence of research ability at the master's level.

Specific requirements include: after admission to the program, 15 hours of graduate course work must be completed at NCSU before a student takes the preliminary (qualifying) examination. The examination, which includes written and oral components covering the major areas, shall be conducted at NCSU . Additional courses may be taken at both UNCW and NCSU and may include courses delivered via electronic media such as video-based coursework or over the MCNC network. Each student shall complete three core courses from related areas of marine science; the areas are biological oceanography, chemical oceanography, geological oceanography and physical oceanography. Specific requirements vary with each student's program, but doctoral programs normally require 27 to 36 hours of course work, excluding research and dissertation credits, beyond the master's degree. Residence requirements must be fulfilled by completing 18 credit hours of continuous registration at NCSU. A research–based dissertation in the major area of specialization must be completed and approved, including a successful oral defense of the work. Students are allowed a maximum of six calendar years after admission to attain candidacy and a maximum of 10 calendar years to complete all degree requirements.

Students interested in this program should contact the Graduate School at UNCW for application materials.

EXTENSION COURSES

The Division of Academic Affairs administers the university's extension (academic) program.

The university operates upper division undergraduate degree completion programs in elementary education, education of young children, nursing (RN access) and criminal justice at the Jacksonville/Onslow County program site. Courses are scheduled on the Coastal Carolina Community College campus as well as the Marine Corps Base, Camp Lejeune. Licensure courses are also offered for several teaching areas.

Additional extension offerings also include undergraduate and graduate courses at off–campus sites. Undergraduate extension applications are received by the Admissions Office while requests for transcripts should be sent to the Office of the Registrar of the University of North Carolina at Wilmington. Graduate extension applications are received by the Graduate School.

Further information concerning all extension courses may be obtained by contacting the Division of Academic Affairs (910) 962-3876.

SCIENCE AND MATHEMATICS EDUCATION CENTER

http://www.smec.uncw.edu

The Science and Mathematics Education Center (SMEC) at UNCW is a member of the University of North Carolina Mathematics and Science Education Network (NC-MSEN). The center applies the resources of UNC Wilmington to improve the teaching and learning of mathematics and science in the schools of southeastern North Carolina. The center, working with faculty from the College of Arts and Sciences and the Watson School of Education, offers a wide range of professional development programs in the areas of mathematics, science and technology for in-service elementary-, middle-, and high school teachers. Through center sponsored seminars, workshops, and courses, teachers can renew licensure in science or mathematics.

SMEC includes Summer Ventures in Science and Mathematics (SVSM), a cost-free, state-funded program for academically talented high school students who may pursue careers based in science and mathematics. The program brings rising juniors and seniors together in residential settings for four weeks of intensive study on a UNC system campus. University faculty and master high school teachers provide the instruction and support for individual student research projects.

Information concerning programs may be obtained by contacting the Science and Mathematics Education Center.

GRADUATE FACULTY

Bylaws governing the Graduate Faculty were initiated in 1990 by the Graduate Council and subsequently approved by both the provost and the chancellor. The Bylaws state that the members of the faculty may apply for the Graduate Faculty whenever they meet criteria established by their respective academic units.

COLLEGE OF ARTS AND SCIENCES

Department of Anthropology

Patricia Barker Lerch, *professor of anthropology*, B.A., Cleveland State University; M.A., Ph.D., The Ohio State University.

Department of Biological Sciences

Daniel G. Baden, *professor of chemistry and biological sciences,* B.A., Hamline University; Ph.D., University of Miami.

J. Craig Bailey, *assistant professor of biological sciences,* B.S., University of North Carolina at Wilmington; M.A., College of William and Mary; Ph.D., Louisiana State University.

Lawrence Bruce Cahoon, *professor of biology*, B.S., Washington and Lee University; Ph.D., Duke University.

Gregory T. Chandler, *assistant professor of biological sciences*, B. Sc., Ph.D., Australian National University.

Ileana E. Clavijo, *associate professor of biology*, B.S., Barry University; M.S., Florida Atlantic University; Ph.D., University of Puerto Rico.

Richard M. Dillaman, *professor of biology*, B.A., University of Virginia; Ph.D., University of South Carolina.

Michael J. Durako, *professor of biology*, B.S., Florida Atlantic University; M.A., Ph.D., University of South Florida.

Steven D. Emslie, *associate professor of biology*, B.A., M.A., University of Colorado; M.S., Northern Arizona University; Ph.D., University of Florida.

Courtney T. Hackney, *professor of biology*, B.S., University of South Alabama; M.S., Emory University; Ph.D., Mississippi State University.

Neil F. Hadley, *professor of biology*, B.A., Eastern Michigan University; Ph.D., University of Colorado.

Paul Edward Hosier, *professor of biology*, B.S., New York State University (New Paltz); M.A., University of Massachusetts; Ph.D., Duke University.

Donald F. Kapraun, *professor of biology*, B.S., Eastern Illinois University; Ph.D., University of Texas at Austin.

Stephen T. Kinsey, *associate professor of biology*, B.S., Old Dominion University; M.S., University of South Florida; Ph.D., Florida State University.

Thomas E. Lankford, Jr., *assistant professor of biological sciences*, B.S., University of North Carolina at Wilmington; M.S., Ph.D., University of Delaware.

Michael A. Mallin, *research professor in the Center for Marine Science*, B.S., Ohio University; M.S., University of Florida; Ph.D., University of North Carolina at Chapel Hill.

Michael A. McCartney, *assistant professor of biological sciences*, B.S., Florida State University; M.S., Case Western Reserve University; Ph.D., State University of New York at Stony Brook.

James Francis Merritt, *associate professor of biology*, B.S., M.A., East Carolina University; Ph.D., North Carolina State University.

Joel J. Mintzes, *professor of biology*, B.S., M.S., University of Illinois, Chicago; Ph.D., Northwestern University.

D. Ann Pabst, *professor of biology*, B.S., University of Maryland; Ph.D., Duke University.

David Emerson Padgett, *professor of biology*, A.B., Duke University; M.S., Ph.D., The Ohio State University.

Joseph R. Pawlik, *professor of biology*, B.S., University of Minnesota; Ph.D., Scripps Institution of Oceanography, University of California, San Diego.

Martin H. Posey, *professor of biology*, B.A., University of North Carolina at Chapel Hill; Ph.D., University of Oregon.

L. Scott Quackenbush, *professor of biology*, B.A., University of Minnesota; M.S., University of West Florida; Ph.D., Florida State University.

Robert D. Roer, *professor of biology*, B.S., Brown University; Ph.D., Duke University.

Laela Saud Sayigh, *associate professor of biology*, B.A., University of Pennsylvania; Ph.D., Massachusetts Institute of Technology/Woods Hole Oceanographic Institute Joint Program.

Frederick S. Scharf, *assistant professor of biological sciences*, B.Sc., State University of New York at Stony Brook; M.Sc., Ph.D., University of Massachusetts.

Thomas Howard Shafer, *associate professor of biology*, B.S., Duke University; M.S., Ph.D., The Ohio State University.

Ronald K. Sizemore, *professor of biology*, B.S., Wake Forest University; M.S., University of South Carolina; Ph.D., University of Maryland.

Ann E. Stapleton, *assistant professor of biological sciences,* B.S., University of Michigan, Ann Arbor; Ph.D., University of Chicago.

Alina M. Szmant, *professor of biological sciences*, B.S., University of Puerto Rico; M.S., University of California at San Diego; Ph.D., University of Rhode Island.

Carmelo R. Tomas, *associate professor of biological sciences,* B.A., American International College; M.S., Ph.D., University of Rhode Island.

Wade O. Watanabe, *research professor in the Center for Marine Science,* B.S., Oregon State University; M.S., University of Hawaii, Honolulu; Ph.D., University of Hawaii, Manoa.

William David Webster, *professor of biology*, B.S., University of North Carolina at Wilmington; M.S., Michigan State University; Ph.D., Texas Tech University.

Ami E. Wilbur, *assistant professor of biological sciences*, B.S., University of Puget Sound; B.S., University of North Carolina at Wilmington; M.S., University of South Carolina; Ph.D., University of Delaware.

Department of Chemistry and Biochemistry

William J. Cooper, *professor of chemistry*, B.S., Allegheny College; M.S., Pennsylvania State University; Ph.D., University of Miami.

Christopher John Halkides, *associate professor of chemistry*, A.B., Wabash College; Ph.D., University of Wisconsin.

Robert D. Hancock, *Will S. DeLoach Distinguished Professor of chemistry,* B.Sc., Rhodes University; Ph.D., University of Cape Town; D.Sc., University of Witwatersrand.

S. Bart Jones, *associate professor of chemistry*, B.S., Davidson College; Ph.D., West Virginia University.

Robert J. Kieber, Jr., *professor of chemistry*, B.S., Cook College, Rutgers University; Ph.D., University of Maryland.

Jack B. Levy, *professor of chemistry*, A.B., Duke University; M.S., Ph.D., North Carolina State University.

John J. Manock, *professor of chemistry*, B.S., Washington and Jefferson College; Ph.D., Ohio University.

Ned H. Martin, *Will S. DeLoach Professor of Chemistry*, A.B., Denison University; Ph.D., Duke University.

Michael Messina, *associate professor of chemistry*, B.S., State University of New York, Stony Brook; Ph.D., University of Pittsburgh.

James H. Reeves, *associate professor of chemistry*, B.A., Ph.D., Northeastern University.

Yousry Sayed, *professor of chemistry*, B.S., M.S., Cairo University; Ph.D., University of Minnesota.

Pamela J. Seaton, *professor of chemistry*, B.A., University of Washington, Seattle; M.A., University of Alaska, Fairbanks; Ph.D., University of Vermont, Burlington.

Stephen A. Skrabal, *associate professor of chemistry*, B.S., College of William and Mary; M.S., Ph.D., University of Maryland.

Charles Richard Ward, *professor of chemistry*, B.S., Manchester College; M.S., Ph.D., Purdue University.

Joan D. Willey, *professor of chemistry*, B.S., Duke University; Ph.D., Dalhousie University.

Jeffrey L. Wright, *Carl B. Brown distinguished professor in marine sciences,* B.Sc., Ph.D., The University, Glasgow, Scotland.

Department of Communication Studies

William R. Bobbitt, *assistant professor of communication studies,* B.A., M.A., University of South Florida; Ph.D., Bowling Green State University.

Patricia Anne Comeaux, *professor of communication studies,* B.A., University of Southwestern Louisiana; M.A., University of Arkansas; Ph.D., Southern Illinois University.

Department of Computer Science

Gur Saran Adhar, *professor of computer science*, B.Sc., Agra University, India; M.B.A., Indian Institute of Management, Bangalore, India; M.S., Ph.D., University of Maryland.

David Roy Berman, *professor of computer science*, B.A., University of Texas at Austin; M.A., University of California at Berkeley; Ph.D., University of Texas at Austin.

Clayton S. Ferner, *assistant professor of computer science,* B.S., Wake Forest University; M.S., Ph.D., University of Denver.

Sridhar Narayan, *associate professor of computer science*, B. Tech., Indian Institute of Technology, Madras; M.S., Ph.D., Clemson University.

Eric K. Patterson, *assistant professor of computer science*, B.A., Ph.D., Clemson University.

Gene A. Tagliarini, *associate professor of computer science*, B.A., M.A., University of South Florida; Ph.D., Clemson University.

Ronald J. Vetter, *professor of computer science*, B.S., M..S., North Dakota State University; Ph.D., University of Minnesota.

Department of Creative Writing

Wendy Brenner, *associate professor of English*, B.A., Oberlin College; M.F.A., University of Florida.

Frank W. Capra, Jr., *distinguished visiting professor of film studies*, B.A., Pomona College; Doctor of Fine Arts, *honoris causa*, University of North Carolina at Wilmington.

Mark D. Cox, *professor of creative writing*, B.A., DePauw University; M.F.A., Vermont College.

Clyde C. Edgerton, *professor of creative writing,* B.A., M.A.T., Ph.D., University of North Carolina at Chapel Hill.

Philip Furia, *professor of creative writing*, B.A., Oberlin College; M.A., University of Chicago; M.F.A., Iowa Writer's Workshop; Ph.D., University of Iowa.

Philip Gerard, *professor of creative writing*, B.A., University of Delaware; M.F.A., University of Arizona.

Rebecca L. Lee, *associate professor of creative writing*, B.A., St. Olaf College; M.F.A., University of Iowa.

Sarah B. Messer, *assistant professor of creative writing*, B.A., Middlebury College, M.F.A., University of Michigan.

David Monahan, *assistant professor of creative writing,* B.A., South Dakota State University; M.F.A., Columbia University.

Michael White, *associate professor of creative writing*, B.A., University of Missouri; Ph.D., University of Utah.

Paul Wilkes, *distinguished visiting professor of English*, B.A., Marquette University; M.S., Columbia University.

Department of Earth Sciences

Lewis J. Abrams, *associate professor of geology*, B.A., University of Colorado, Boulder; M.S., Ph.D, University of Rhode Island.

William Franklin Ainsley, Jr., *professor of geography*, A.B., M.A., University of North Carolina at Chapel Hill; M.Div., Southeastern Baptist Theological Seminary; Ph.D., University of North Carolina at Chapel Hill.

Robert T. Argenbright, *associate professor of geography*, B.A., M.A., Ph.D., University of California, Berkeley.

Michael M. Benedetti, *assistant professor of geography*, A.B., University of Chicago; M.S., Ph.D., University of Wisconsin, Madison.

David Blake, *associate professor of geology*, B.S., University of North Carolina at Chapel Hill; M.S., North Carolina State University; Ph.D., Washington State University.

William James Cleary, *professor of geology*, A.B., Southern Illinois University; M.A., Duke University; Ph.D., University of South Carolina.

James Allen Dockal, *professor of geology*, B.S., M.S., Iowa State University; Ph.D., University of Iowa.

Douglas W. Gamble, *assistant professor of geography*, B.A., Miami University; M.A., Ph.D., University of Georgia.

Nancy R. Grindlay, *professor of geology*, B.A., Dartmouth College; Ph.D., University of Rhode Island.

Joanne M. Halls, *assistant professor of geographic information systems*, B.S., University of Denver; M.S., Ph.D., University of South Carolina.

William Burleigh Harris, *professor of geology*, B.S., Campbell College; M.S., West Virginia University; Ph.D., University of North Carolina at Chapel Hill.

Eric J. Henry, *assistant professor of geology,* B.S., M.S., University of New Mexico; Ph.D., University of Arizona.

Mary Elizabeth Hines, *associate professor of geography*, B.A., University of North Carolina at Greensboro; M.A., University of Kansas; Ph.D., Louisiana State University.

John R. Huntsman, *associate professor of geology*, B.S., Mount Union College; M.A., Ph.D., Bryn Mawr College.

Patricia H. Kelley, *professor of geology*, B.A., College of Wooster; A.M., Ph.D., Harvard University.

Richard A. Laws, *professor of geology*, B.A., University of North Carolina at Wilmington; M.A., Ph.D., University of California, Berkeley.

Lynn Ann Leonard, *professor of geology*, B.S., College of William and Mary; M.S., Duke University; Ph.D., University of South Florida.

Michael S. Smith, *associate professor of geology*, B.S., Millersville University; Ph.D., Washington University.

Paul A. Thayer, *professor of geology*, B.A., Rutgers University; Ph.D., University of North Carolina at Chapel Hill.

Department of English

Diana L. Ashe, *assistant professor of English,* B.A., Southwestern University; M.A., Ph.D., Texas A&M University.

Eleanor Byington, *associate professor of English*, B.A., University of California; M.S., Ph.D., University of Michigan.

Cara N. Cilano, *assistant professor of English*, B.A., M.A., St. Bonaventure University; Ph.D., Duquesne University.

John P. Clifford, *professor of English*, B.A., St. Francis College; M.A., Ph.D., New York University.

Rosemary DePaolo, *professor of English,* B.A., Queens College; M.A., Ph.D., Rutgers University.

Janet M. Ellerby, *professor of English*, B.S., University of Oregon, Eugene; M.A., California State University, Northridge; Ph.D., University of Washington.

Elizabeth Ervin, *associate professor of English*, B.A., University of Nebraska at Kearney; M.A., Texas Christian University; Ph.D., University of Arizona.

Christopher Gould, *professor of English*, B.A., University of Virginia; M.A., Ph.D., University of South Carolina.

Lu Ellen Huntley, *associate professor of English*, B.A., North Carolina State University; M.A., Middlebury College; Ed.D., North Carolina State University.

Paula K. Kamenish, *associate professor of English*, B.A., Centre College of Kentucky; M.A., Ph. D, University of North Carolina at Chapel Hill.

Katherine L. Montwieler, *assistant professor of English,* B.A., College of the Holy Cross; M.A., University of Wisconsin at Milwaukee; Ph.D., University of Georgia.

Keith Newlin, *professor of English*, B.A., M.A., Colorado State University; Ph. D., Indiana University.

Colleen A. Reilly, *assistant professor of English*, B.A. John Carroll University; M.A., Ph.D., Purdue University.

Kathy Rugoff, *associate professor of English*, B.A., Syracuse University; M.A., University of Florida; Ph.D., Florida State University.

Lee Schweninger, *professor of English*, B.A., University of Colorado; M.A., University of Connecticut at Storrs; Ph.D., University of North Carolina at Chapel Hill.

Jo Ann Seiple, *professor of English*, B.S., M.A., Ed. D., East Texas State University.

Richard C. Veit, *professor of English*, B.A., University of Notre Dame; M.A., Ph.D., University of Iowa.

John Lewis Walker, III, *professor of English*, A.B., University of Virginia; M.A., University of California, Berkeley; Ph.D., University of Virginia.

Barbara F. Waxman, *professor of English*, B.A., Douglass College, Rutgers University; M.A., City College of New York; Ph.D., City University of New York.

Michael D. Wentworth, *professor of English*, B.A., University of Kansas; M.A., Eastern Michigan University; Ph.D., Bowling Green State University.

Department of Environmental Studies

Robert B. Buerger, *professor of environmental studies*, B.S., Colorado State University; M.S., University of Kentucky; Ph.D., State University of New York, College of Environmental Science and Forestry, Syracuse.

Jack Charles Hall, *professor of geology*, B.S., Grand Valley State College; M.S., University of North Carolina at Chapel Hill; Ph.D., The Ohio State University.

Jeffery M. Hill, *associate professor of environmental studies*, B.A., M.A., M.S., Ed.S., Re.D., Indiana University.

Department of Film Studies

Todd M. Berliner, *associate professor of film studies*, B.A., M.A., Ph.D., University of California, Berkeley.

Donald E. Bushman, *associate professor of film studies*, B.S., M.A., Illinois State University; Ph.D., University of Tennessee, Knoxville.

Louis F. Buttino, *professor of film studies*, B.A., Colgate University; M.A., University of Miami; M.A., Colgate Rochester Divinity School; Ph.D., Syracuse University.

Department of Foreign Languages and Literatures

Maria A. Cami-Vela, *associate professor of Spanish*, B.A., M.A., Ph.D., University of Florida.

Andrea Deagon, *associate professor of classics*, B.A., Guilford College; Ph.D., Duke University.

Denise M. DiPuccio, *professor of Spanish*, B.A., Ohio University; M.A., Ph.D., University of Kansas.

Pierre J. Lapaire, *professor of French*, B.A., M.A., University of Perpignan, France; M.A., Ph.D., University of North Carolina at Chapel Hill.

Donna J. McGiboney, *assistant professor of Spanish*, B.A., M.A., Temple University; Ph.D., State University of New York at Stony Brook.

Joann McFerran Mount, *associate professor of Spanish*, B.A., University of Arkansas; M.A., Ph.D., University of Kentucky.

Richard Terry Mount, *professor of Spanish*, B.A., Vanderbilt University; M.A., University of North Carolina at Chapel Hill; Ph.D., University of Kentucky.

Teresita J. Parra, *associate professor of Spanish*, B.A., Widener University; M.A., Ph.D., University of Virginia.

John Joseph Stevens, *assistant professor in Spanish*, B.A., University of Southern California; M.A., San Diego State; Ph.D., University of Southern California.

Peter N. Thomas, *associate professor of Spanish*, B.A., M.A., Ph.D., University of New Mexico.

Department of Health and Applied Human Sciences

John P. Bennett, *professor of physical education*, A.B., College of William and Mary; M.Ed., Virginia Commonwealth University; Ed.D., Northern Illinois University.

Clarice S. Combs, *associate professor physical education*, B.S., University of Wisconsin-Oshkosh; M.A., Ph.D., The Ohio State University.

Deborah A. Dowd, *associate professor of physical education*, B.A., Glassboro State College; M.S., Arizona State University; Ed.D., University of Georgia.

James H. Herstine, *assistant professor of parks and recreation management,* B.A., Wake Forest University; M.A., University of Southern California; M.S., University of North Carolina at Chapel Hill; Ph.D., North Carolina State University.

Michael A. Perko, *associate professor of health education,* B.S., M.S., East Stroudsburg University; Ph.D., University of Alabama at Tuscaloosa.

Carl A. Stockton, *professor of health education,* B.S., M.A., University of Florida; Ph.D., University of Tennessee, Knoxville.

Department of History

Kathleen Christine Berkeley, *professor of history*, B.A., M.A., Ph.D., University of California, Los Angeles.

Yixin Chen, *associate professor of history*, B.A., Anhui Normal University; M.A., Nanjing University; Ph.D., Washington University.

Andrew Clark, *professor of history*, B.A., Columbia University; M.A., Ohio University; Ph.D., Michigan State University.

Walter H. Conser, Jr., *professor of philosophy and religion and professor of history*, B.A., University of California, Irvine; A.M., Ph.D., Brown University.

Chris E. Fonvielle, *visiting assistant professor of history*, B.A., University of North Carolina at Wilmington; M.A., East Carolina University; Ph.D., University of South Carolina.

Harold L. Langfur, *assistant professor of history*, A.B., Harvard College; M.A., Ph.D., University of Texas.

David L. La Vere, *professor of history*, B.A., M.A., Northwestern State University (Louisiana); Ph.D., Texas A&M University.

Susan Purves McCaffray, *professor of history*, B.A., College of Wooster; M.A., Ph.D., Duke University.

William McCarthy, *associate professor of history*, B.A., Miami University; M.A., Ph.D., Boston University.

Lynn W. Mollenauer, *assistant professor of history*, B.A., Amherst; M.A., University of Chicago; Ph.D., Northwestern.

William D. Moore, *assistant professor of history,* A.B., Harvard College; Ph.D., Boston University.

Clarissa L. Pollard, *associate professor of history*, B.A., M.A., Ph.D., University of California, Berkeley.

Michael Seidman, *professor of history*, B.A., Swarthmore College; M.A., University of California, Berkeley; Ph.D., University of Amsterdam.

Robert M. Spaulding, Jr., *associate professor of history*, B.A., University of Rochester; M.A., Ph.D., Harvard University.

Virginia R. Stewart, *associate professor of history*, B.A., Knox College; M.A., Purdue University; Ph.D., Northwestern University.

Robert Brent Toplin, *professor of history*, B.S., Pennsylvania State University; M.A., Ph.D., Rutgers University.

Paul A. Townend, *assistant professor of history*, B.A., Colgate University; M.A., Ph.D., University of Chicago.

Larry Winfield Usilton, III, *professor of history*, B.A., M.A., Ph.D., Mississippi State University.

Alan Douglas Watson, *professor of history*, B.A., Duke University; M.A., East Carolina University; Ph.D., University of South Carolina.

Graduate Research Faculty in Marine Science

David Wilson Freshwater, *research professor,* B.S., University of North Carolina at Wilmington; M.S., North Carolina State University; Ph.D., University of North Carolina at Chapel Hill.

Michael A. Mallin, *research professor in the Center for Marine Science*, B.S., Ohio University; M.S., University of Florida; Ph.D., University of North Carolina at Chapel Hill.

Wade O. Watanabe, *research professor in the Center for Marine Science,* B.S., Oregon State University; M.S., University of Hawaii, Honolulu; Ph.D., University of Mawaii, Manoa.

Department of Mathematics and Statistics

James E. Blum, *assistant professor of mathematics and statistics,* B.A., University of Michigan; M.S., Ph.D., Oklahoma State University.

Jeffrey L. Brown, *professor of mathematics and statistics*, B.S., M.A., Ph.D., University of Georgia.

Yaw O. Chang, *associate professor of mathematics and statistics*, B.S., National Chaio-Tung University, Taiwan; M.S.E., Ph.D., Johns Hopkins University.

Karin M. Deck, *associate professor of mathematics and statistics*, B.S., Lewis & Clark College; M.S., Ph.D., University of Oregon.

Wei Feng, *professor of mathematics and statistics*, B.S., Huazhong University of Science and Technology, China; Ph.D., North Carolina State University.

Michael A. Freeze, II, *assistant professor of mathematics and statistics,* B.S., North Carolina State University; Ph.D., University of North Carolina at Chapel Hill.

Dargan Frierson, Jr., *professor of mathematics and statistics,* B.A., M.A., University of North Carolina at Greensboro; Ph.D., University of Arizona.

Daniel X. Guo, *assistant professor of mathematics and statistics,* B.A., M.A., Wuhan University; M.A., Ph.D., Indiana University.

Russell L. Herman, *associate professor of mathematics and statistics*, B.A., Empire State College; M.A., Temple University; M.S., Ph.D., Clarkson University.

John K. Karlof, *professor of mathematics and statistics*, B.A., State University of New York at Oswego; M.S., State University of New York at Stonybrook; M.A., Ph.D., University of Colorado.

Subramanyam Kasala, *professor of mathematics and statistics*, B.Sc., M.Sc., S.V. University, Tirupati, India; Ph.D., Indian Statistical Institute, Calcutta, India.

Xin Lu, *professor of mathematics and statistics*, B.S., Huazhong University of Science and Technology; Ph.D., North Carolina State University.

Gabriel G. Lugo, *associate professor of mathematics and statistics,* B.A., M.A., Ph.D., University of California, Berkeley.

Douglas D. Smith, *professor of mathematics and statistics*, B.S., M.S., University of Illinois; Ph.D., Pennsylvania State University.

Karan B. Smith, *associate professor of mathematics and statistics*, B.A., Clemson University; M.S., M.B.A., Ph.D., University of South Carolina.

Matthew L. TenHuisen, *associate professor of mathematics and statistics*, B.S., Hope College; M.S., Ph.D., Clemson University.

Department of Philosophy and Religion

Herbert Berg, *associate professor of philosophy and religion*, B.A., University of Waterloo, Ontario; M.A., Ph.D., University of Toronto, Ontario.

Candace C. Gauthier, *professor of philosophy*, B.A., State University of New York at Oswego; M.S., State University of New York at Potsdam; M.A., Ph.D., University of North Carolina at Chapel Hill.

Don A. Habibi, *professor of philosophy and religion*, B.A., University of California, Los Angeles; M.A., Ph.D., Cornell University.

N. Samuel Murrell, *associate professor of philosophy and religion,* B.A., Jamaica Theological Seminary; M.A., Wheaton Graduate School; Ph.D., Drew University.

Walter Thomas Schmid, *professor of philosophy and religion*, B.A., M. Phil., Ph.D., Yale University.

Joe Bransford Wilson, *associate professor of philosophy and religion,* B.A., M.A., University of Wisconsin; Ph.D., University of Virginia.

Department of Physics and Physical Oceanography

Moorad Alexanian, *professor of physics*, B.S., University of Rhode Island; M.S., Ph.D., Indiana University.

Frederick M. Bingham, *associate professor of physics*, B.A., Oberlin College; Ph.D., University of California, San Diego.

Liping Q. Gan, *assistant professor of physics,* B.S., M.S., Beijing University; Ph.D., University of Manitoba.

Marvin K. Moss, *professor of physics*, B.S., Elon College; M.S., Ph.D., North Carolina State University.

Department of Political Science

Thomas J. Barth, *professor of political science*, B.A., University of Notre Dame; M.A., University of Chicago; Ph.D., Virginia Polytechnic Institute and State University.

Milan J. Dluhy, *professor of political science,* B.A., University of Illinois; M.A., Southern Illinois University; Ph.D., University of Michigan.

James H. Herstine, *assistant professor of parks and recreation management,* B.A., Wake Forest University; M.A., University of Southern California; M.S., University of North Carolina at Chapel Hill; Ph.D., North Carolina State University.

Mark T. Imperial, *assistant professor political science,* B.A., University of Miami; M.A., University of Rhode Island, Ph.D., University of Indiana.

W. Lee Johnston, *professor of political science*, B.A., University of North Carolina at Chapel Hill; M.S., Ph.D., University of Maryland.

Roger Coyle Lowery, *professor of political science*, B.A., M.A., Southern Illinois University; Ph.D., Washington University (St. Louis).

Stephen S. Meinhold, *associate professor of political science*, B.A., University of Missouri-St. Louis; M.A., Ph.D., University of New Orleans.

Earl Sheridan, *professor of political science*, B.A., Appalachian State University; M.A., Ph.D., University of Tennessee.

Department of Psychology

Katherine Ely Bruce, *professor of psychology*, B.A., Rhodes College; M.S., M.A., Ph.D., University of Georgia.

Caroline M. Clements, *associate professor of psychology*, B.A., M.S., Ph.D., Northwestern University.

Dale J. Cohen, *professor of psychology*, B.A., B.F.A., Alfred University; M.A., Ph.D., University of Virginia.

Steven I. Dworkin, *professor of psychology*, B.S., University of Maryland; M.S., Ph.D., University of Florida.

J. Mark Galizio, *professor of psychology*, B.A., Kent State University; M.S., Ph.D., University of Wisconsin-Milwaukee.

Robert L. Hakan, *associate professor of psychology*, B.A., University of North Carolina at Wilmington; M.A., Ph.D., University of Wyoming.

Anne E. Hungerford, *assistant professor of psychology*, B.A., Kenyon College; M.S., Ph.D., University of Pittsburg.

Lee Anderson Jackson, Jr., *professor of psychology*, B.A., Hampden-Sydney College; M.A., Ph.D., University of Florida.

James D. Johnson, *professor of psychology*, B.A., North Carolina Agriculture & Technical State University; Ph.D., Indiana University.

Julian Rooks Keith, *professor of psychology*, B.A., University of North Carolina at Wilmington; M.A., Ph.D., University of Colorado.

Joseph M. Kishton, *professor of psychology*, B.S., M.A., Ph.D., The Ohio State University.

Len B. Lecci, *associate professor of psychology*, B.A., M.A., Carleton University, Ottawa; Ph.D., Arizona State University.

Sally Joy MacKain, *associate professor of psychology*, B.A., University of California, Santa Cruz; Ph.D., University of North Carolina at Chapel Hill.

Bryan Paul Myers, *assistant professor of psychology,* B.A., M.A., Carleton University, Ottawa; Ph.D., Ohio University.

Simone P. Nguyen, *assistant professor of psychology*, B.A., University of Michigan, Ann Arbor; M.A., Ph.D., University of Illinois, Urbana-Champaign.

Nora E. Noel, *associate professor of psychology*, B.A., University of Cincinnati; M.A., Ph.D., State University of New York at Binghamton.

Richard Ogle, *assistant professor of psychology,* B.A., Point Loma Nazarene University; M.A., San Diego State University; Ph.D., University of New Mexico.

William H. Overman, Jr., *professor of psychology and adjunct professor of biology*, B.A., Wake Forest University; M.S., Ph.D., Pennsylvania State University.

Carol Ann Pilgrim, *professor of psychology*, B.S., Virginia Polytechnic Institute and State University; M.S., Ph.D., University of Florida.

Raymond C. Pitts, Jr., *associate professor of psychology*, B.A., M.S., Ph.D., University of Florida.

Antonio E. Puente, *professor of psychology*, B.A., University of Florida; Ph.D., University of Georgia.

D. Kim Sawrey, *associate professor of psychology*, B.A., University of California, Berkeley; M.S., Ph.D., University of Florida.

Department of Social Work

Robert G. Blundo, *associate professor of social work*, B.A., Emory University; M.S.W., Adelphi University; Ph.D., University of Maryland at Baltimore.

Arthur J. Frankel, *professor of social work*, B.S., University of Illinois-Champaign, M.S.W., Ph.D., University of Michigan-Ann Arbor.

John P. Nasuti, *associate professor of social work*, B.S.W., New Mexico State University; M.S.W., West Virginia University; D.S.W., University of Utah.

P. Nelson Reid, *professor of social work,* B.A., M.S.W., University of North Carolina at Chapel Hill; Ph.D., The Ohio State University.

Department of Sociology and Criminal Justice

Susan Bullers, *associate professor of sociology*, B.A., M.A., University of Colorado-Denver; Ph.D., State University of New York at Buffalo.

M. Reid Counts, *assistant professor of criminal justice*, B.S., M.C.J., Ph.D., University of South Carolina.

Eleanor Krassen Covan, *professor of sociology*, A.B., M.A., Temple University; Ph.D., University of California, San Francisco.

Darrell D. Irwin, Jr., *associate professor of criminal justice*, B.A., University of Florida; M.A., Ph.D., Loyola University of Chicago.

Donna Lee King, *associate professor of sociology*, B.A., State University of New York, New Paltz; M.A., West Georgia College; Ph.D., City University of New York, Graduate Center.

Michael O. Maume, *assistant professor of criminal justice,* B.A., Virginia Wesleyan College, M.A., College of William and Mary; Ph.D., Louisiana State University.

Clyde O. McDaniel, *visiting professor of sociology*, B.S., Fayetteville State University; M.A., North Carolina Central University; Ph.D., University of Pittsburgh.

Stephen J. McNamee, *professor of sociology*, A.B., Rutgers University, Camden; M.A., Ph.D., University of Illinois, Urbana–Champaign.

Robert Kent Miller, Jr., *professor of sociology*, A.B., Franklin and Marshall College; M.A., Ph.D., Temple University.

Jammie L. Price, *assistant professor sociology*, B.A., The Catholic University of America; M.A., East Carolina University; Ph.D., North Carolina State University.

Lynne L. Snowden, *associate professor of criminal justice*, B.S., M.A., Ph.D., University of Delaware.

Cecil L. Willis, *professor of criminal justice*, B.S., East Tennessee University; M.S., East Carolina University; Ph.D.,Virginia Polytechnic Institute and State University.

CAMERON SCHOOL OF BUSINESS

Department of Accountancy and Business Law

Raquel M. Alexander, *assistant professor of accountancy*, B.S., University of Kansas; M.T., Arizona State University; Ph.D., University of Texas at Austin; CPA.

Lawrence C. Clark, *professor of business law*, B.A., Knox College; J.D., John Marshall Law School; L.L.M., Depaul University School of Law.

Fara M. Elikai, *associate professor of accountancy*, B.S., Institute of Advanced Accounting–Tehran; M.S., University of Kansas; Ph.D., University of Oklahoma.

Pamela S. Evers, *assistant professor of business law*, B.S., Kansas State University; M.B.A., Emory University; L.L.M., Lewis and Clark College; J.D., Southern Methodist University.

Randall Keith Hanson, *professor of business law*, B.S., B.A., J.D., University of North Dakota; L.L.M., Southern Methodist University.

William K. Harmon, *professor of accountancy*, B.S., M.A., D.B.A., University of Tennessee.

Daniel M. Ivancevich, *professor of accountancy*, B.A., Baylor University; Ph.D., Texas A&M University.

Susan H. Ivancevich, *associate professor of accountancy,* B.B.A., University of Georgia; Ph.D., Texas A&M University.

LeAnn Luna, *assistant professor of accountancy,* B.B.A., Southern Methodist University; M.T., University of Denver.

John A. Marts, *professor of accountancy*, B.S., University of North Carolina at Charlotte; M.A.T., Ph.D., University of South Carolina; C.P.A.

Howard O. Rockness, *professor of accountancy*, B.S., M.B.A., Ph.D., University of Washington; C.P.A.

Joanne W. Rockness, *professor of accountancy*, B.S., M.B.A., M.A., Western Michigan University; Ph.D., University of North Carolina at Chapel Hill; C.P.A.

Department of Economics and Finance

Denis G. Carter, *associate professor of economics*, A.B., Boston College; Ph.D., University of Florida.

William S. Compton, *professor of finance,* B.S., State University New York College, Buffalo; M.B.A., Ph.D., Florida State University.

Christopher F. Dumas, *associate professor of economics*, B.S., North Carolina State University; M.S., Ph.D., University of California, Berkeley.

J. Edward Graham, *associate professor of finance*, B.S., Washington and Lee University; M.B.A., University of North Florida; Ph.D., University of South Carolina.

William Woodward Hall, Jr., *professor of economics*, B.A., Presbyterian College; M.S., Ph.D., Clemson University.

Roger Post Hill, *professor of economics and finance*, B.S., North Carolina State University; M.S., Oklahoma State University; Ph.D., Michigan State University.

Luther Drew Lawson, *professor of economics*, B.S., M.S., Indiana State University; Ph.D., University of Tennessee.

Ned Stephen Robinson, *associate professor of economics*, B.S., M.S., Middle Tennessee State University; Ph.D., University of Oklahoma.

William H. Sackley, *associate professor of finance,* B.A., Central College; M.B.A., Drake University; Ph.D., University of Nebraska, Lincoln.

Peter W. Schuhmann, *professor of management*, B.S., University of North Carolina at Wilmington; M.E., Ph.D., North Carolina State University.

Kevin Joel Sigler, *professor of finance*, B.S., Cornell University; M.B.A., Creighton University; Ph.D., University of Nebraska at Lincoln.

John C. Whitehead, *associate professor of economics,* B.A., Centre College; M.A., Ph.D., University of Kentucky.

Department of Information Systems and Operations Management

Ravija Badarinathi, *professor of management science*, B.S., M.S., Allahabad University; Ph.D., University of Georgia.

Cem Canel, *professor of production/operations management*, B.S., Istanbul State Academy; M.S.I.E., M.B.A., Ph.D., University of Houston.

John M. Garris, *associate professor of production/operations management*, B.A., University of North Carolina at Chapel Hill; M.S., Ph.D., Clemson University.

Jack Arthur Gowan, Jr., *associate professor of management information systems*, B.A., M.B.A., Samford University; Ph.D., Clemson University.

William H. Gwinn, *assistant professor of management information systems*, B.A., Sacramento State College; M.S., U.S. Naval Postgraduate School; Ph.D., Texas Tech University

Thomas N. Janicki, *assistant professor of management information systems*, B.S., Carnegie Mellon University; M.B.A., University of Pittsburgh; Ph.D., Kent State University.

Douglas M. Kline, *associate professor of information systems,* B.S., M.B.A., Ph.D., Kent State University.

Lewis Drew Rosen, *professor of production/operations management*, B.S., M.B.A., Old Dominion University; Ph.D., University of South Carolina.

George P. Schell, *professor of management information systems*, B.S., M.A., University of Florida; Ph.D., Purdue University.

Barry A. Wray, *associate professor of management science*, B.S., Bridgewater College; M.S., Ph.D., Virginia Polytechnic Institute and State University.

Department of Management and Marketing

Thomas L. Baker, *associate professor of marketing*, B.B.A., M.P.A., University of Kentucky; Ph.D., Florida State University.

Craig Scott Galbraith, *professor management,* B.A., M.S., San Diego State University; Ph.D., Purdue University.

Stephen Coale Harper, *professor of management*, B.B.A., University of New Mexico; M.B.A., University of Arizona; Ph.D., Arizona State University.

L. Vincent Howe, Jr., *associate professor of marketing*, B.S., M.B.A., Ph.D., University of Georgia.

Tammy Garrison Hunt, *professor of management*, B.S., High Point College; M.B.A., Middle Tennessee State University; Ph.D., Florida State University.

A. Robert Konopaske, *assistant professor of management,* B.A., Rutgers University; M.I.B.S., University of South Carolina; Ph.D., University of Houston.

Thomas W. Porter, *assistant professor of marketing,* B.S., Purdue University; M.B.A., Ph.D., Indiana University.

Rebecca I. Porterfield, *associate professor of management*, B.S., M.B.A., Mississippi State University; Ph.D., Clemson University.

Carlos L. Rodriguez, *assistant professor of management*, B.A., Federal University of Rio de Janeiro, Brazil; M.I.B.S., University of South Carolina; Ph.D., Florida Atlantic University.

WATSON SCHOOL OF EDUCATION

Department of Curricular Studies

James Milton Applefield, *associate professor of education*, B.A., University of North Carolina at Chapel Hill; M.A., Emory University; M.Ed., University of Georgia; Ph.D., Georgia State University.

Edna N. Collins, *assistant professor of education,* B.A., University of North Carolina at Chapel Hill; M.A., The Ohio State University; M.S., Ph.D., University of North Carolina at Greensboro.

Stephanie Z. Corrigan, *assistant professor of education,* B.S., University of Tennessee; M.Ed., Peabody College at Vanderbilt University; Ed.D., University of Virginia.

MaryAnn Davies, *professor of education*, B.A. University of Illinois; M.A., Ed.D., Virginia Polytechnic Institute and State University.

Kathy R. Fox, *assistant professor of education*, University of North Carolina at Greensboro; M.A., California State University; Ph.D., University of California, Santa Barbara.

Tracy Y. Hargrove, *assistant professor of education,* B.A., M.Ed., University of North Carolina at Wilmington; Ph.D., University of North Carolina at Chapel Hill.

Hathia A. Hayes, *associate professor of education*, B.S., M.S., Louisiana Polytechnic Institute; Ed.D., University of Georgia.

Barbara A. Honchell, *assistant professor of education*, B.S., Ball State University; M.S., Indiana University; Ed.S., Central Michigan University, Mount Pleasant; Ph.D., University of North Carolina at Chapel Hill.

Richard A. Huber, *professor of education*, B.A., Wartburg College; M.S., Ph.D., University of Iowa.

Hengameh Kermani, *associate professor of education*, B.A., M.A., Ph.D., University of California at Santa Barbara.

Louis J. LaNunziata, Jr., *associate professor of education*, B.S., East Stroudsburg University; M.Ed., Bloomsburg University; Ph.D., Ohio State University.

Linda C. Mechling, *assistant professor of education,* B.S., Indiana University; M.B.A., M.Ed., Georgia State University; Ph.D., University of Georgia.

Kathleen M. Roney, *assistant professor of education,* B.S., Bloomsburg State University; M.T.S., Washington Theological Union, Washington, D.C., Ed.D., Temple University.

Marcee M. Steele, *professor of education*, B.S., Syracuse University; M.Ed., American University; Ph.D., University of South Florida.

Carol Chase Thomas, *professor of education*, B.A., University of Kentucky; M.Ed., The Citadel; Ed.D., University of Kentucky.

Bradford Lawrence Walker, *associate professor of education*, B.S., M.Ed., Brigham Young University; Ed.D., Indiana University.

Department of Specialty Studies

Cathy L. Barlow, *professor of education*, B.A., Milligan College; M.A., Ball State University; Ed.D., University of Tulsa.

Edward J. Caropreso, *associate professor of education,* B.A., University of North Carolina at Chapel Hill; M.A., Ph.D., University of Georgia.

Sue-Jen Chen, *assistant professor of education,* B.A., National Taiwan Academy of Arts; M.S., North Texas State University; Ph.D., Florida State University.

Joseph R. Feinberg, *assistant professor of education,* University of North Carolina at Chapel Hill; M.A., Ed.S., Ph.D, University of Georgia.

John C. Fischetti, *professor of education,* B.A. University of Virginia; Ed.D., University of Massachusetts at Amherst.

S. David Gill, *associate professor of education,* B.A., University of Tennessee, Knoxville; M.Ed., University of Tennessee, Chattanooga; Ed.D., University of Tennessee, Knoxville.

Andrew E. Hayes, *associate professor of education,* B.S., M.A., Louisiana Polytechnic Institute; Ed.D., University of Georgia.

Nandy A. Hoffman, *assistant professor of education,* B.S., M.Ed., Ph.D., Miami University, Ohio.

Martin A. Kozloff, *Watson Professor of Education,* A.B., A.M., Ph.D., Washington University.

Dennis S. Kubasko, Jr., *assistant professor of education, B.S., M.Ed.,* Pennsylvania State University; Ph.D., University of North Carolina at Chapel Hill.

Maurice M. Martinez, *professor of education,* B.S., Xavier University; M.A., Ph.D., University of Michigan.

Mahnaz Moallem, *associate professor of education,* B.A., College of Translation-Iran; M.S., College of Television and Cinema-Iran; Ph.D., Florida State University.

Edna Holland Mory, *associate professor of education,* B.S., Jacksonville State University; M.M.E., Ph.D., Florida State University.

Arnold K. Murdock, *assistant professor of education,* B.S.Ed., Virginia Tech; M.Ed., University of Virginia; Ed.D., Virginia Tech.

Catherine R. Nesbit, *associate professor of education,* B.A., University of Iowa; M.Ed., University of North Carolina at Charlotte; Ph.D., Ohio State University.

Angelia R. Reid-Griffin, *assistant professor of education,* B.S., MAED., East Carolina University; Ph.D., North Carolina State University.

Robert W. Smith, *associate professor of education,* B.Sc., M.Sc., Manchester University, England; Ed.D., University of Massachusetts.

Jennifer B. Summerville, *associate professor of education,* B.B.A., Baylor University; M.S., University of North Texas; Ph.D., University of Northern Colorado.

Karen S. Wetherill, *associate professor of education,* B.A., Glassboro State College; M.Ed., University of North Carolina at Wilmington; Ed.D., North Carolina State University.

SCHOOL OF NURSING

Virginia W. Adams, *professor of nursing,* B.S.N., Winston-Salem State University; M.S.N., University of North Carolina at Chapel Hill; Ph.D., University of North Carolina at Greensboro.

Perri J. Bomar, *professor of nursing,* B.S.N., University of Akron; M.S.N., Case Western Reserve University; Ph.D., University of Akron.

Bettie J. Glenn, *associate professor of nursing,* B.S.N., Winston Salem State University; M.S.N., University of California at San Francisco; Ed.D., University of South Carolina at Columbia.

Paul Allen Gray, Jr., *associate professor of nursing*, Diploma in Nursing, Mercy Hospital School of Nursing; B.S.N., North Carolina Central University; M.S., Duke University; A.B., M.S.N., Ph.D., University of North Carolina at Chapel Hill.

Jeanne K. Kemppainen, *associate professor of nursing,* B.S.N., Wayne State University; M.S.N., East Carolina University; Ph.D., University of California, San Francisco.

Yeoun Soo Kim-Godwin, *assistant professor of nursing,* B.S., Seoul National University; M.A., Asian Center for Theological Seminary; M.P.H., Yonsei University; M.N., Ph.D., University of South Carolina.

RuthAnne Kuiper, *assistant professor of nursing,* B.S.N., University of the State of New York; M.S.N., University of California, Los Angeles; Ph.D., University of South Carolina.

Susan E. Scheuring, *associate professor of nursing*, B.S.N., D'Youville College; M.S.N., University of Pennsylvania; Ph.D., University of Colorado.

Douglas M. Turner, *assistant professor of nursing*, B.S., University of the State of New York, Albany; M.S.N., University of Virginia; M.S.N., University of North Carolina at Greensboro; Ph.D., Touro University International, Los Alamitos, CA.

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